



WORLD CERAMIC MACHINERY MANUFACTURERS

8TH EDITION YEAR 2021







PREFACE

The publication of the 2019 Financial Statement Analysis officially marks the launch of the new MECS Research Department. The organisation has been transformed from a study centre affiliated to an industrial association into a limited liability company that operates autonomously on the market with the aim of providing an increasingly rapid and complete response to the needs of international ceramic sector companies.

Amid the COVID pandemic, 2020 is a difficult year to be embarking on a new enterprise, but we are well aware that times of crisis are also a source of great opportunity. With more than twenty years of experience conducting studies in the field of capital goods – not just for ceramics but also for packaging and plastics – we have a wealth of knowledge and a similar approach to research to that of the companies in our sectors, combining attention to detail with a vision for the future. And today we have integrated this expertise with a new managerial approach and new young staff members.

Operating as a business for businesses, we are well aware that industrial development is built on a relationship of mutual understanding, continuous improvement and the sharing of vital information. This is the starting point for our extensive range of up-to-date economic and statistical studies and data, available not only to companies but also to all researchers interested in understanding the development trajectories of traditional yet strategic manufacturing sectors.

MECS Chairman

Paolo Gambuli

ABSTRACT

The global ceramic and brick machinery manufacturers' 2019 financial statements confirm the significant and **longstanding superiority of Italian technologies and manufacturers** over their international competitors. Italian companies, particularly those operating in the niche market of ceramic sanitaryware machinery, have reported an improvement in their economic and financial performance despite the unfavourable demand situation that has impacted the downstream capital goods supply chain.

The sectors that have been most severely hit by the crisis are the ceramic tile industry and the construction market in general. The financial statement analysis conducted by the MECS research centre has confirmed that the close, almost symbiotic, relationship between the ceramic machinery manufacturers and their client sectors together with the presence of an extensive network of upstream sub-suppliers are now fundamental competitive resources for the supply chain. It is therefore essential to adopt public industrial policies capable of protecting these resources, particularly in times of crisis.

The key factor that enables Italian companies to maintain their high levels of performance would appear to be the large investments they are making in tangible and intangible capital resources, reflected in the very high productivity of the workforce. The most profitable and resilient technologies are those produced by companies specialising in moulds, kilns and digital decoration and finishing machinery.

The benchmarking analysis shows that the production strategy and business model adopted by the best performing companies retain factors such as high industrial margins, which guarantee liquidity and creditworthiness, and a high degree of capitalisation, which protects against excessively large borrowing costs.







CONTENTS

	CHAPTER 1	
	INTRODUCTION	_12
	CHAPTER 2	
	FINANCIAL STATEMENT	
	ANALYSIS OF ITALIAN	
	VS. NON-ITALIAN MANUFACTURERS	16
	MANOT ACTORERS	_10
41		
	CHAPTER 3	
	CLUSTER AND	
	BENCHMARKING	29
	ANALYSIS	_29
	3.1 CLUSTER TECHNIQUE	S _23
	3.2 CLUSTER	22
	PERFORMANCES	_23
	22 COMPANY DV	
	3.3 COMPANY BY CLUSTER	_24

CHAPTER 4 BALANCE SHEETS

Abrasivi adria srl	_44
Adi srl	_46
Air power group spa	_48
Ancora spa	_50
Appel srl elettronica applicata	_52
Assogroup srl	_54
Autin spa	_56
Automazioni cismac srl	_58
B.C.R. Srl	_60
Barcom srl	_62
Bedeschi spa	_64
Beralmar tecnologic sa	_66
Bernini impianti srl	_68
Bevini srl	_70
Bmr spa	_72
Bongioanni macchine spa	_74
C.B.M. Srl	_76
C.I.Me.S. Srl	_78
C.M.A. Srl	_80
Cami depurazioni srl	_82
Capaccioli srl	_84





Cer impianti srl	_86	Emil mec srl	_130
Ceramic instruments srl	_88	Eurofilter spa	_132
Ceratec	_90	Exagono tecnico sl	_134
Cerinnov	_92	F.D.S. Ettmar srl	_136
Cerinnov, unipessoal, Ida	_94	F.M. Srl	_138
Certech spa	_96	Favole srl	_140
Cima srl	_98	Fazzini filiere srl	_142
Cimma ing. Morandotti & c. Srl	_100	Fb engineering srl	_144
Clas srl	_102	Ferrari & cigarini srl	_146
Cleia	_104	Fujian haiyuan composites technology	_148
Co.Me.S. Srl	_106	company limited	
Cosmac srl	_108	G.P. Service srl	_150
Cuccolini srl	_110	G.Tech srl	_152
Devel srl	_112	Gabbrielli technology srl	_154
Diamant-d srl	_114	Gaiotto automation spa	_156
Diatex spa	_116	Gape due spa	_158
Digital design srl	_118	Gruppo tecnoferrari spa	_160
Dongguan longly machinery co., Ltd.	_120	Guangdong jumper thermal t	_162
Durst phototechnik spa	_122	echnology co., Ltd.	
Efi cretaprint sl.	_124	Guangdong zhongyao kiln company	_164
Ego design srl	_126	limited	
Emar srl	_128	I.C.F. & Welko spa	_166



CONTENTS

In.Te.Sa. Spa	_168	Maincer sl	_210
Induzir - industria e comercio de		Manfredini e schianchi srl	_212
equipamentos, Ida	_170	Marcheluzzo spa	_214
Inkside srl	_172	Marfin srl	_216
Innova maquinaria industrial sl.	_174	Marpak srl	_218
Italdiamant spa	_176	Meccanica 2p srl	_220
Italforni pesaro srl	_178	Medici f.Lli srl	_222
Italforni srl	_180	Metalcertima - industria	_224
Italstampi spa	_182	metalomecanica, s.A.	
Italvision srl	_184	Molcer Ida	_226
I-tech srl	_186	Molde azul sl	_228
Keda industrial group company limited	_188	Monte-bianco diamond applications	_230
Keller hcw gmbh	_190	company ltd	
Keramould srl	_192	N b p srl	_232
King-strong new material technology	_194	Nannetti srl	_234
company Itd		Netzsch espana sa	_236
L.E.M.A. Srl	_196	Nuova alce srl	_238
Later meccanica srl	_198	Nuova lecon srl	_240
Latermec srl	_200	Nuova o.M.C. Srl	_242
Leirimetal, s.A.	_202	Nuova o.M.I.P. Srl	_244
Luna abrasivi srl	_204	Nuova sima spa	_246
Mac.Ker srl	_206	Officina bocedi srl	_248
Maer srl	_208	Officina c.M.C. Srl	_250





_252	Seedex srl	_296
_254	Sermat srl	_298
_256	Sertam srl	_300
_258	Shenzhen runtianzhi digital equipment	_302
_260	company limited	
_262	Signitaly poligraph srl	_304
_264	Simec srl	_306
_266	Sitec srl	_308
_268	Siti b&t group spa	_310
_270	Soltek srl	_312
_272	Studio 1 automazioni industriali srl	_314
_274	Stylgraph srl	_316
_276	Surfaces technological abrasives spa	_318
_278	System ceramics spa	_320
_280	T.G. Mac srl	_322
_282	Takahama industry co.,Ltd.	_324
1	Takasago industry co.,Ltd.	_326
_284	Talleres foro sa	_328
_286	Talleres morte e hijos sl	_330
_288	Tecauma	_332
_290	Teckwin technology development co., Ltc	l334
_292	Tecnimol sl	_336
_294	Tecno - italia srl	_338



CONTENTS

Tecno diamant diamanti industriali srl	_340
Tecno impianti srl	_342
Tecnocer italia srl	_344
Tecnofiliere srl	_346
Tecnografica spa	_348
Tecnomec borghi srl	_350
Tecnopress srl	_352
Tecnosint srl	_354
Tek-mak srl	_356
Tosilab spa	_358
Traimec srl	_360
Trebax srl	_362
Tyrolit vincent srl	_364
Unimak makina san ve tic as	_366
United symbol srl	_368
Whitech srl	_370

CHAPTER 5

MECS MULTIDIMENSIONAL RANKING COMPUTATION	
CRITERIA	_373
5.1 TOURNOVER	_374
5.2 EMPLOYEES	_376
5.3 CASH FLOW	_378
5.4 <i>ROE</i>	_380
5.5 <i>ROI</i>	_382
5.6 <i>ROS</i>	_384
5.7 <i>ROA</i>	_386
5.8 EQUITY RATIO	_388
5.9 GEARING	_390
5.10 ADDED VALUE	_392
5.11 EBITDA MARGIN	_394
5.12 EBIT MARGIN	_396
5.13 PROFIT MARGIN	_398
5.14 PROBABILITY OF	
DEFAULT	_400
5.15 CRIF SCORE	_402
5.16 THE FINAL RANKING	404





CHAPTER 6

APPENDIX INDEX AND RATIO GLOSSARY

_413

6.1 METHODOLOGICAL NOTES _413

6.2 TREATMENTOF

ANOMALOUS CASES AND

SAMPLE SIZE __415

6.3 INDEX AND RATIO

GLOSSARY -417



INTRODUCTION

THIS REPORT DESCRIBES A COMPLETE METHOD FOR EVALUATING THE PERFORMANCE OF THE MOST SIGNIFICANT SAMPLE OF WORLD CERAMIC MACHINERY MANUFACTURERS.

It is the first part of a broader suite of products, for analyzing data, provided by the MECS Research Department (the other products are the international sales trends and the benchmarking analyses) which have the aim of providing entrepreneurs, managers, scholars and sector analysts with a tool for greater understanding of the main characteristics and trends in the sector and its key players and competitors.

It is also a powerful integrated tool containing organized data that will help entrepreneurs and managers draw up the best manufacturing and commercial strategies at a company or group level.

It will enable readers to evaluate the economic performance of sector companies in Italy and in other countries (or groups of countries) where tiles manufacturers have a significant presence.

THE REPORT IS ORGANISED AS FOLLOWS:

- Chapter 2 provides an initial analysis of the results on a geographical basis. At this stage the analysis is performed by grouping companies together by country: ITALY compared to other countries and the world totale. This section examines the incidence of costs and profit margins at all levels of operation and the relevant trends, comparing the last few years of financial statement data and calculating the relevant variations. The main geographical regions are then compared and commented on.
- Chapter 3 provides an analysis of companies grouped into homogeneous groups or clusters of profitability performance based on a cluster analysis approach. The aim is to interpret economic and financial data and performance indicators independently of prior, geographical, sectoral or dimensional classifications, thereby allowing a more consistent comparison to be made with companies with similar results and levels of performance regardless of their size and nationality. In other words, direct comparisons can be made between companies' management and business models. This section also examines the most important economic and financial variables (including indices and ratios) for differentiating companies into clusters, namely the indicators that more than others determine whether a company is to be placed in a strongly performing cluster (corresponding to a business model) or one experiencing structural, economic or management difficulties. Lastly, the characteristics of the various business models are compared and a list is





provided of Italian and non-Italian companies with similar characteristics.

In the second part (**Chapter 4**) focus is on the individual companies, each of which is examined and compared with the reference groups described in the first part.

In this section the companies are analyzed through a standard index-based financial statement analysis using balance sheet and income statement data.

In particular it focuses on the following:

- structure and recent trends in the economic and financial results of the various management areas (e.g. production, production costs and the inventory cycle; personnel management; financial management; asset management, etc.);
- 2. structure of debt and equity capital;
- 3. main financial indices and economic ratios;
- **4.** the **added value creation process**, including its implications in terms of costs and plant capacity utilization and make-or-buy trade-off corporate decisions (which in turn determine the company's degree of vertical integration);
- **5. other profitability margins** at various levels in the company's chain of value:
- 6. alert and financial vulnerability indices;
- **7. ratings** (from various sources) of individual companies, each placed within the context of sector averages;
- **8.** graphical representation (using **RADAR diagrams**) of the degree of similarity between each company and the cluster it has been assigned to during the cluster and benchmarking analysis. The radar diagrams show the key characteristics of the companies and clusters based on the 6 most interesting variables.

In **Chapter 5** world ceramic machinery manufacturers are further classified according to a **multidimensional ranking based on a system of 12 indicators** (10 financial statement ratios and 2 rating company synthetic indicators).

This will enable readers to make a direct comparison between a company's results and those of its competitors

It should be noted that compared to the previous edition of the report on the economic and financial performance of the world ceramic machinery manufacturers (three-year period 2017-2019), the choice of the 12 indicators underwent some minor changes. This decision was based above all on the results of the cluster analysis showing which indicators can be considered robust for discriminating between levels of company performance.

The general approach to construction of the multidimensional ranking proposed by the MECS Research Department and the corresponding results were confirmed in the cluster analysis.

Methological notes and ratio glossary are described in detail in Chapter 6.



2

FINANCIAL STATEMENT ANALYSIS

OF ITALIAN VS. NON-ITALIAN MANUFACTURERS

The decline continues

The financial statement analysis of ceramic and brick industry machinery manufacturers conducted by the MECS Research Department based on 2019 data confirms the continued year-on-year decline in revenues and economic performance. However, the key profitability ratios (Return on Investment ROI and Return on Sales ROS) show that despite the crisis Italian companies have maintained a significantly higher performance than their global competitors. The Italian companies' average ROI stood at 4.64% (compared to the previous year's 5.45%), more than 1.5 percentage points higher than the average in other producer countries (3.17%).

The Italian manufacturers, who are the world leaders in this mechanical engineering segment and make up more than 80% of the global companies that filed 2019 financial statements, likewise posted an average ROS of also down from the of 2018 but more than 2.5 points higher than that of international competitors. This relative resilience in terms of margins (even the Italian average net profit of higher than that of international competitors) together with the lower capitalisation of Italian companies corresponds to a high net return on equity (ROE), which although 2 percentage points down from the previous year is almost entage points higher than the average value in other countries.

The traditionally low level of capitalisation in relation to loan capital, evidenced by an equity ratio of selection is also gradually improving (up from in 2017). The economic crisis has convinced many Italian companies of the need to reduce short-term debt (by 3 percentage points), while maintaining a high level of long-term debt (almost three times the average of other world producers). Notwithstanding the relative theoretical risk associated with low debt coverage, it is worth noting that the economic situation and the projected interest rate trends mean that financial charges are expected to remain very low for several years to come. The average interest rate on debt incurred by Italian ceramic machinery manufacturers was positive but close to zero in 2019 (overall rate, which average mortgage rate). So as long as interest rates are expected to remain at record low levels for the foreseeable future, the average industrial return on investment is high (above a second and the cost of borrowing money is almost zero, it is highly advantageous for companies to maintain relatively high leverage and bear the corresponding higher costs and risks.

Added value margin rises

Observing the value creation process that emerges from the reclassified "value added" income statement, we find an average value added margin of a big year-on-year improvement (). This two-point gain in added value is certainly attributable to a slowdown in the procurement of subcontracted semi-finished products, raw materials and energy, all triggered on a bottom-up basis by the slowdown in orders

RETURN ON EQUITY

ltaly World

FINANCIAL STATEMENT ANALYSIS BY SECTORS AND TECHNOLOGIES

stry as a whole but over global sub-samples chosen according to the type of technology (machinery produced and sold) and the target sector. As for client sector, it should be noted that the majority of the equipment sold by manufacturers of machinery for the ceramic industry is supplied to the ceramic tile sector. Companies that predominantly serve this sector perform slightly better than average in terms of both ROI and ROE due to the slightly higher not profit margin of 4.5% However, in

This kind of financial statement analysis is conducted not over the indu-

ROL due to the slightly higher net profit margin of 4.5%. However, in terms of financial ratios, the subgroup of tile machinery manufacturing companies display results that are largely in line with those of Italian producers as a whole.

By contrast, the small number of manufacturers of sanitaryware machinery reported a far superior performance, with ROI of 7% and EBITDA of 8%, as well as an average net profit of more than 7% of turnover. Moreover, although the level of labour costs per employee is only about 3,000 costs.

nover is the lowest in the entire sector (with a very high productivity per employee, as in the case of Italian companies as a whole). So although it is experiencing a period of crisis like the other segments, the ceramic

san taryware machinery sector remains highly profitable and healthy in terms of structure and cash flow.

gling badly, with an average profitability that-despite still being in positive territory barely reaches a quarter of a percentage point. They have a very low level of capitalisation and high long-term debt, although it is

70% higher than turnover. The Quick ratio (or Acid test) is barely sufficient (1.1) while the Current ratio (1.54) is satisfactory, below the industry average but in line with that of many manufacturing companies. So at least

ave age but in line with that of many manufacturing companies. So at least in terms of their liquidity, the brick and tile machinery manufacturers have cash flows that are above the threshold levels usually adopted to

dist nguish between a healthy and a high-risk financial structure.

We will now go on to describe the classification of companies by technology segments. As in previous years, two very different situations emerge. On the one hand, companies producing moulds, kilns, digital decoration machinery and finishing machinery display good levels of

result given the already negative economic environment of 2019. At the

EBITDA PER SECTOR

% moulds, kilns, digital decoration and finishing machinery

lpha presses, materials preparation and traditional decoration machinery

Sanitaryware best performer

eur

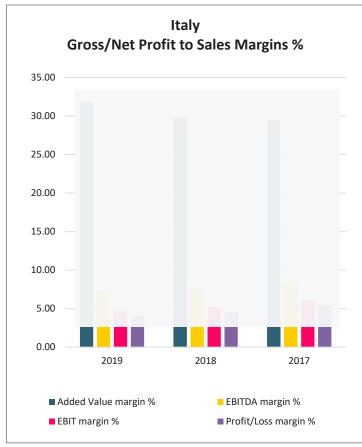


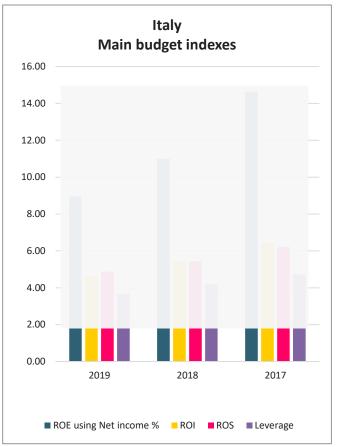
GENERAL OVERVIEW: AVERAGE RATIOS

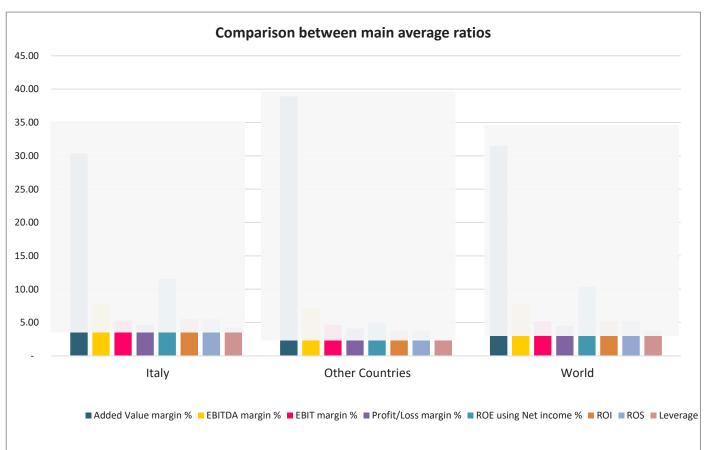


MAIN RATIOS	2019	2018	2017	AVERAGE 2017-2019
ROE using Net income %	8.95	11.00	14.63	11.53
ROI				
ROS				
ROT				
Leverage				
Incidence of non-core operations %				
Current Assets to Total Assets Ratio %				
Added Value margin %				30.36
Added Value per employee (th EUR)	70.94	72.77	72.36	72.02
Costs of employees / Turnover				
Liabilities to Equity Ratio (1/solv ratio)				
Equity Ratio %				
Short-term debt Ratio %				
Long-term debt Ratio %				
Quick Ratio				
Current Ratio				
Equity to fixed assets Ratio	3.04	2.81	2.95	2.93
EBITDA margin %	7.28	7.82	8.42	7.84
EBIT margin %	4.61	5.25	6.07	5.31
Profit/Loss margin %				
ROCE using net income				
ROA using net income				
Cash flow / Operating revenue %	5.57	5.76	6.00	5.78
OTHER Operational Ratios				
Net assets turnover	2.22	2.68	2.80	2.57
Interest cover				
Stock turnover				
Collection period (days)				
Credit period (days)	62.40	56.87	62.39	60.55
OTHER Structure Ratios				
Shareholders liquidity ratio Long term NFP /EBITDA	2.90	2.63	2.25	2.59
Short term NFP /EBITDA				0.00
Gearing %				94.97
OTHER Per employee Paties of a visit sup				
OTHER Per employee Ratios values in th EUR Profit per employee	11.30	13.70	15.90	13.63
Operating revenue per employee				975.45
Average cost of employee				40.01
Shareholders funds per employee				97.40
Working capital per employee				30.04
	70.21			70.20
Total assets per employee	280.88	260.61	271.41	277.63











3 CLUSTER AND BENCHMARKING ANALYSIS

3.1

CLUSTERING TECHNIQUES

MECS has classified companies in the global ceramic tile manufacturing sector using robust clustering statistical techniques so as to offer readers an initial general benchmarking analysis of the performance of each company against the standards of the homogeneous competitive and managerial context in which it is located.

The keyword is homogeneity

The keyword here is homogeneity: the goal of the analysis is to enable companies to be compared with a homogeneous set of direct or indirect competitors that have the same characteristics in terms of internal structure (assets, production, financial), behaviour (in the labour market, in the downstream supply chain and in the use of outsourcing upstream) and performance (gross and net profitability, financial strength and resilience).

Following this statistical analysis based on a classification of the 2019 financial data, five homogeneous clusters of companies were identified and named in order of decreasing levels of performance as AA, A, B, C and D. A further cluster was created for companies that are not classified as part of specific groups and instead have remained unclassified: grouped together in cluster O, these companies differ both from each other and from those in other clusters in terms of the various structural, managerial and profitability criteria taken into consideration. For the benchmarking of the companies in cluster zero, reference should therefore be made to the overall sample medians shown in the table under the column "Cluster O".

THE TOP PERFORMING COMPANIES

In the following table we can compare the median results of the clusters in terms of the key variables describing structure, management and performance characteristics. We will focus in particular on the results and median characteristics of the very high and high performance clusters AA and A respectively), both of which contain companies with above

Cluster AA

ROI & ROS above 13%

lian, one Spanish and two Portuguese. Companies in this cluster have median values of ROI and ROS that are both above 13% and both more than twice as high as those of the following cluster A (which nonetheless contains companies with a significantly higher than average performance). The value added margin of the very high performance cluster AA companies is well above the average (36%) and productivity per employee is close to 90,000 euros, 25,000 euros more than the median value for the sector. Thanks to a labour cost to turnover ratio of just 17%, the EBITDA margin stands at 14.6%, double the industry median value of 7%. The median operating profit is a fraction of a percentage point lower due to the net impact of financial, extraordinary and tax management, so that the net profit after tax is also approximately 13% (this compares with a net profit ratio in relation to turnover across the sample as a whole of 3%). The stock management process is highly efficient (stock turnover rate of 13, compared to an industry-wide median value of 6.3). Cluster AA has a high level of capital investment per employee amounting to 306,000 euros (sector as a whole 240,000 euros). From an equity and financial perspective, the high-performance companies in cluster AA have a level of capitalisation of 47%, a value that is

Cluster AA companies all have excellent liquidity ratios for coverage of

FIND OUT MORE:

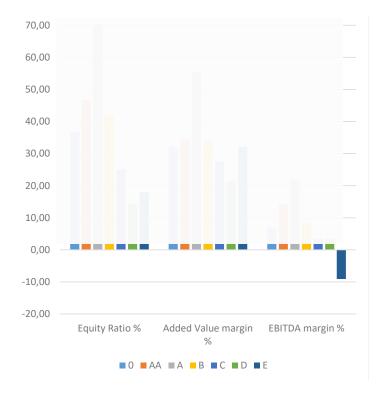
Leverage

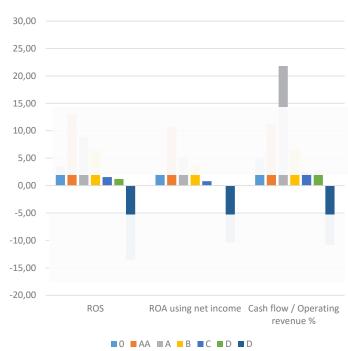
rates on the loans are low compared to the profitability the company gains from the invested capital, in other words the ROI.

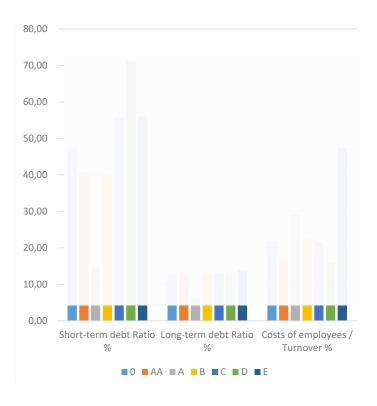


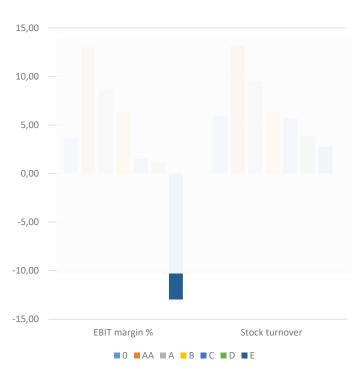
MAIN RATIOS	0	AA	Α	В	С	D	E
ROE using Net income %	6,75	22,95	6,92	8,76	4,03	0,24	-68,34
ROI							
ROS							
ROT							
Leverage							
Incidence of non-core operation							
Current Assets to Total Assets R	82,16	93,36	62,37	81,52	83,71	78,30	66,72
Added Value margin %	32,19	34,38	55,48	34,00	27,37	21,32	32,11
Added Value per employee							40,33
Equity Ratio %							17,93
Short-term debt Ratio %							56,02
Long-term debt Ratio %							13,87
Quick Ratio							0,70
Current Ratio							1,21
Equity to fixed assets Ratio							0,54
EBITDA margin %							-9,11
EBIT margin %							
Profit/Loss margin %	3,08	12,75	11,26	5,48	1,34	-0,14	-14,66
ROCE using net income							-31,59
ROA using net income							-10,34
Cash flow / Operating revenue %							-10,81
OTHER Operational Ratios							
Interest cover %	5,29	54,41	30,93	17,28	2,81	1,07	-11,64
Stock turnover							2,75
Collection period (days)							87,44
Credit period (days)	61,46	56,34	39,81	65,41	63,00	90,81	76,96
OTHER Structure Ratios							
Shareholders liquidity ratio							
NFP on EBITDA							
Gearing %	55,82	37,87	13,36	49,40	80,25	186,35	98,50
OTHER Per employee Ratios							
Profit per employee							
Operating revenue per employee	210,01						
Costs of employees / Turnover %							
Average cost of employee							
Shareholders funds per employe							
Working capital per employee							
Total assets per employee	2 42,06						















COMPANIES BY CLUSTER

The statistical procedures used for identifying key variables as predictors of differences between clusters showed a high degree of significance for most of the variables used for the index-based financial statement analysis.

The same statistical procedure (TwoStep Clustering in SPSS) allowed companies from the sample of ceramic tile manufacturers to be placed in the cluster most similar to them on the basis of all the significant variables (14 variables, described in greater detail below).

The companies belonging to the various clusters are listed in the following table.



COMPANY NAME	COUNTRY	CLUSTER	CLUSTER	CLUSTER
COMPANT NAME	ISO CODE	2017	2018	2019
ABRASIVI ADRIA SRL	IT	AA	AA	AA
AIR POWER GROUP SPA	IT	А	A	AA
APPEL SRI ELETTRONICA APPLICATA	IT	0	A	AA
BARCOM SRI	IT	AB	AB	AA
	IT	AA	A	AA
	IT	A	A	AA
DIGITAL DESIGN SRL	IT	A	A	AA
EGO DESIGN SRI	IT	new	new	AA
EXAGONO TECNICO SI	ES	AA	AA	AA
	IT	AA	A	AA
INDLIZIR - INDLISTRIA E COMERCIO DE EQUIPAMENTOS I DA	PT	AB	AB	AA
	IT IT	AA	AA	AA
ITAL FORNI SPI	IT	A	D	AA
ITALVISION SRI	IT	AA	A	AA
N B P SRI	IT	A	A	AA
	IT	В	В	AA
NI IOVA ALCE SPI	IT	A	A	AA
NUOVA LECON SPI	IT	0	A	AA
OFFICINA ROCEDISDI	IT	0	A	AA
	IT	AA	A	AA
DRATEA ENGINEEDING SDI	IT	AA	A	AA
	IT	AB	A	AA
SEDMAT SDI	IT	0	A	AA
STUDIO 1 AUTOMAZIONI INDUSTRIALI SRI	IT	AA	AA	AA
TDAINEC SDI	IT	AB	AB	AA
	IT	AA	AB	AA
EA77INI FILIEDE SOI	IT	AA	AA	AA
MONTE PIANCO DIAMOND APPLICATIONS COMPANY LTD	CN	new	new	AA
MOLCED LDA	PT	0	AA	A
	ES	AA	A	A
SE TE C CDI	IT	new	new	A
	IT	A	A	A
STILORAPHI SKL	IT	new	AA	A
TALLEDES MODIFIE E HILLOS SI	ES	A	A	A
P.O. SDI	IT	AB	AB	В
	IT	A	AB	В
C D M SDI	IT	0	AB	В
CAMI DEDITIDAZIONII SDI	IT	AB	A	В
CENTECH SDA	IT	В	В	В
CIMA CDI	IT	А	A	В
CIMMA INC. MODANDOTTI 8 C. SDI	IT	0	AB	В
DIATEVEDA				
DLIPST PHOTOTECHNIK SPA	IT IT	A new	A new	B B
EM SDI	IT	AB	AB	В
FAVOLE SDI	IT	AA	AB	В
	IT	0	A	В
GAIOTTO ALITOMATION SPA	IT	В	В	В
I C E & WELKO SDA	IT	AB	AB	В
INNOVA MAQLIINARIA INDUSTRIAL SI	ES	new	A	В
ITAL DIAMANT SDA	IT			В
TALDIAMANT SEA	11	А	Α	D







BALANCE SHEETS

At the time of printing of the present report a few companies, according to our main data provider (Orbis, Bureau Van Djik) haven't yet any available data for 2019. Hence the single companies' sheets we present separates into two different subgroups: those who actually have published 2019 data from those who haven't.

THE FOLLOWING SUBSECTION PRESENTS THE SINGLE COMPANIES' BALANCE SHEETS FOR FIRMS WHOSE DATA ARE AVAILABLE FOR 2017-2019.

Company name

City

Country

Website address

ABRASIVI ADRIA SRL SANT'AMBROGIO DI VALPOLICELLA Italy

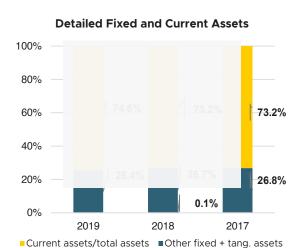
BALANCE SHEET values in th EUR	2019	2018	2017	%VAR 19/18
Fixed assets	9,499	9,293	9,733	2.2%
Intangible fixed assets				
Tangible fixed assets	8,369	8,152	8,599	2.7%
Other fixed assets	1,118	1,118	1,120	0.0%
Current assets	27,890	25,387	26,564	
Stock	7,048	6,655	5,446	
Debtors	8,224	8,132	8,654	1.1%
Other current assets	12,618	10,599	12,464	19.0%
Cash & cash equivalent	7,339	4,292	6,972	71.0%
Total assets	17,389	34,679	36,297	
Shareholders funds	28,628	26,972	27,774	6.1%
Capital				%
Other shareholders funds	28,617	26,962	27,763	ā i %
Non-current liabilities	1,239	1,166	1,249	6.2%
Long term debt				n.a.
Other non-current liabilities	1,239	1,166	1,249	6.2%
Provisions				14.5%
Current liabilities	7,523	6,540	7,274	
Loans	Ō	0	0	
Creditors	3,715	3,452	4,588	7.6%
Other current liabilities				23.3%
Total shareh. funds & liab.	37,389	34,679	36,297	7.8%
Working capital	11,558	11,335	9,512	2.0%
Net current assets	20,367	18,846	19,290	

INCOME STATEMENT values in th EUR

Operating revenue(Turnover)	25,999	24,501	25,190	6.1%
Sales	25,099	23,205	24,621	8.2%
EBIT (Core operations margin)	4,933	4,214	6,746	17.0%
Financial revenue	28	<u>24</u>	50	14.9%
Financial expenses				35.0%
Financial P/L				-16.1%
P/L before tax	4,987	4,278	6,431	16.5%
Taxation	1,331	1,080	1,827	23.3%
P/L after tax	3,655	3,199	4,603	14.3%
Extr. and other revenue				n.a.
Extr. and other expenses				n.a.
Extr. and other P/L	0	Q	Q	n.a.
P/L for period [=Net income]	3,655	3,199	4,603	14.3%

SYNTHETIC DATA values in th EUR

SYNTHETIC DATA values in th EUR				
Material costs				2.3%
Costs of employees	5,272			6.2%
Depreciation & Amortization				1.7%
Interest paid				-6.5%
Cash flow		3,972		11.8%
Added Value				10.2%
EBITDA				14.7%
Number of employees	88	83	83	6.0%



■Intangible fixed assets

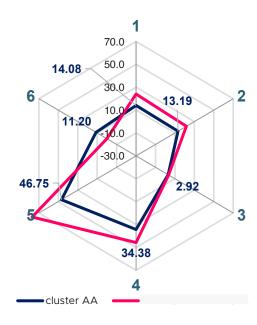




ROE using Net income % ROI ROS ROT Leverage Incidence of non-core operations % Current Assets to Total Assets Ratio Added Value margin % Added Value per employee (th EUR) Costs of employees / Turnover Liabilities to Equity Ratio (1/solv ratio) Equity Ratio % Short-term debt Ratio % Long-term debt Ratio % Guick Ratio Current Ratio Equity to fixed assets Ratio EBITDA margin % Profit/Loss margin % ROCE using net income	MAIN RATIOS	2019	2018	2017	19/18
ROS ROT Leverage Incidence of non-core operations % Current Assets to Total Assets Ratio Added Value margin % Added Value per employee (th EUR) Costs of employees / Turnover Liabilities to Equity Ratio (1/solv ratio) Equity Ratio % Short-term debt Ratio % Long-term debt Ratio % Quick Ratio Current Ratio Equity to fixed assets Ratio EBITDA margin % Profit/Loss margin %	ROE using Net income %	12.77	11.86	16.58	7.7%
ROT Leverage Incidence of non-core operations % Current Assets to Total Assets Ratio Added Value margin % Added Value per employee (th EUR) Costs of employees / Turnover Liabilities to Equity Ratio (1/solv ratio) Equity Ratio % Short-term debt Ratio % Long-term debt Ratio % Quick Ratio Current Ratio Equity to fixed assets Ratio EBITDA margin % Profit/Loss margin %	ROI	13.19	12.15	18.58	8.6%
Leverage Incidence of non-core operations % Current Assets to Total Assets Ratio Added Value margin % Added Value per employee (th EUR) Costs of employees / Turnover Liabilities to Equity Ratio (1/solv ratio) Equity Ratio % Short-term debt Ratio % Long-term debt Ratio % Quick Ratio Current Ratio Equity to fixed assets Ratio EBITDA margin % Profit/Loss margin %	ROS				
Incidence of non-core operations % Current Assets to Total Assets Ratio Added Value margin % Added Value per employee (th EUR) Costs of employees / Turnover Liabilities to Equity Ratio (1/solv ratio) Equity Ratio % Short-term debt Ratio % Long-term debt Ratio % Guick Ratio Current Ratio Equity to fixed assets Ratio EBITDA margin % Profit/Loss margin %	ROT				-1.6%
Current Assets to Total Assets Ratio Added Value margin % Added Value per employee (th EUR) Costs of employees / Turnover Liabilities to Equity Ratio (1/solv ratio) Equity Ratio % Short-term debt Ratio % Long-term debt Ratio % Quick Ratio Current Ratio Equity to fixed assets Ratio EBIT margin % Profit/Loss margin %	Leverage				
Added Value margin % Added Value per employee (th EUR) Costs of employees / Turnover Liabilities to Equity Ratio (1/solv ratio) Equity Ratio % Short-term debt Ratio % Long-term debt Ratio % Quick Ratio Current Ratio Equity to fixed assets Ratio EBIT margin % Profit/Loss margin %	Incidence of non-core operations %				2.4%
Added Value per employee (th EUR) Costs of employees / Turnover Liabilities to Equity Ratio (1/solv ratio) Equity Ratio % Short-term debt Ratio % Long-term debt Ratio % Quick Ratio Current Ratio Equity to fixed assets Ratio EBITDA margin % Profit/Loss margin %	Current Assets to Total Assets Ratio				1.9%
Costs of employees / Turnover Liabilities to Equity Ratio (1/solv ratio) Equity Ratio % Short-term debt Ratio % Long-term debt Ratio % Quick Ratio Current Ratio Equity to fixed assets Ratio EBITDA margin % Profit/Loss margin %	Added Value margin %	44.04	43.21	50.10	1.9%
Liabilities to Equity Ratio (1/solv ratio) Equity Ratio % Short-term debt Ratio % Long-term debt Ratio % Quick Ratio Current Ratio Equity to fixed assets Ratio EBITDA margin % Profit/Loss margin %	Added Value per employee (th EUR)	125.60	120.80	148.63	4.0%
Equity Ratio % Short-term debt Ratio % Long-term debt Ratio % Quick Ratio Current Ratio Equity to fixed assets Ratio EBITDA margin % Profit/Loss margin %	Costs of employees / Turnover	20.28			0.1%
Short-term debt Ratio % Long-term debt Ratio % Guick Ratio Current Ratio Equity to fixed assets Ratio EBIT margin % Profit/Loss margin %	Liabilities to Equity Ratio (1/solv ratio)	0.31			7.1%
Long-term debt Ratio % Quick Ratio Current Ratio Equity to fixed assets Ratio EBITDA margin % EBIT margin % Profit/Loss margin %	Equity Ratio %				-1.6%
Quick Ratio Current Ratio Equity to fixed assets Ratio EBITDA margin % EBIT margin % Profit/Loss margin %	Short-term debt Ratio %				6.7%
Current Ratio 5 Equity to fixed assets Ratio 5 EBITDA margin % 6 EBIT margin % 7 Profit/Loss margin %	Long-term debt Ratio %				-1.5%
Equity to fixed assets Ratio EBITDA margin % EBIT margin % Profit/Loss margin %	Quick Ratio	2.77			-3.3%
EBITDA margin % 6 EBIT margin % 7 Profit/Loss margin % 7	Current Ratio	3.71			-4.5%
EBIT margin % Profit/Loss margin %	Equity to fixed assets Ratio	3.01			3.8%
Profit/Loss margin %	EBITDA margin %	22.00	20.36	29.76	
	EBIT margin %	18.97			10.3%
ROCE using net income	Profit/Loss margin %	19.18	17.46	25.53	9.8%
	ROCE using net income				7.6%
ROA using net income	ROA using net income				6.0%
Cash flow / Operating revenue %		17.00	10.21	21.20	5 424

cluster AA 1 EBITDA % 2 ROS 3 Long term NFP/EBITDA 4 AV/Sales% 5 Equity ratio % 6 Cash flow/Op. rev.%

%VAR



OTHER Operational Ratios

OTHER Structure Ratios

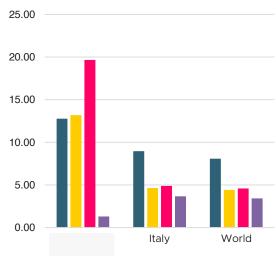
Long term NFP /EBITDA Short term NFP /EBITDA

Gearing %

Shareholders liquidity ratio Liabilities to capital ratio

Net assets turnover	0.87	0.87	0.87	0.0%
Interest cover				
Stock turnover				0.2%
Collection period (days)	113.88	119.49	123.68	-4.7%
Credit period (days)				1.4%

Main ratios (2019)

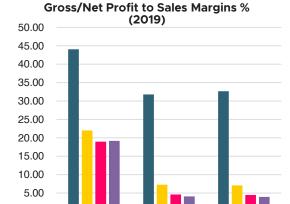


OTHER Per employee Ratios values in th EUR



■ROE using Net income % ■ROI ■ROS ■Leverage

RATINGS Low High Low



Italy

MORE Probability of default (%) 0.15

CRIF Financial Stability Score: 755

High

Added Value margin %EBIT margin %

■EBITDA margin % ■Profit/Loss margin %

World

3.77
MORE Credit Limit on op. rev %

4.∠ INFP on EBIT %

5

RANKING

MECS MULTIDIMENSIONAL RANKING COMPUTATION CRITERIA

The criteria for construction of the multidimensional ranking proposed by MECS gave preference to the choice of **3 synthetic indices for company profitability** (ROI, ROS and ROA), **4 indices for economic/productive and management efficiency** (Added Value margin, EBITDA margin, EBIT margin, Profit/Loss margin) and **3 indices for structure and financial solidity** (Cash Flow margin, Equity ratio, Gearing).

The dimensional indicators (Operating Revenue and N. Employees), although published, are not directly linked to economic performance, hence are not part of the multidimensional ranking.

The ROE index (Return on Equity) is largely used and so its ranking is published here; nonetheless it does not enter into calculation of the MECS multidimensional ranking because of its ambiguity. In facts ROE could be higher both because of higher profits and because of a lower equity.

Moreover two different financial rating are added, namely "MORE PROB-ABILITY OF DEFAULT" as well as "CRIF SCORE"; both are computed into the MECS multidimensional ranking.

The companies are first ranked on the basis of a multidimensional index that takes account of the company's ranking for each chosen indicator. The final ranking is then calculated as an average of the other 12 rankings. It should be noted however that the chosen indicators implicitly assign greater weight to the profitability and efficiency of management processes than to financial strength and equity structure.



TURNOVER 5.1

	COMPANY NAME	OPERATING REVENUE (TURNOVER)		COMPANY NAME	OPERATING REVENUE (TURNOVER)
1	SACMI IMOLA S.C.	1,264,219	51	TECAUMA	10,150
2	KEDA INDUSTRIAL GROUP COMPANY LIMITED	822,565	52	DIATEX SPA	9,910
3	SYSTEM CERAMICS SPA	228,758	53	CERINNOV	9,621
4	SITI B&T GROUP SPA	182,839	54	TECNOGRAFICA SPA	9,176
5	DURST PHOTOTECHNIK SPA	145,406	55	BEVINI SRL	9,000
6	BEDESCHI SPA	119,246	56	FERRARI & CIGARINI SRL	8,975
7	SURFACES TECHNOLOGICAL ABRASIVES SPA	99,310	57	SE.TE.C. ORL	8,669
8	EFI CRETAPRINT SL.	82,594	58		8,239
9	MONTE-BIANCO DIAMOND APPLICATIONS	77,393	59		8,158
10	NUOVA SIMA SPA	72,177	60	MANFREDINI E SCHIANCHI SRL	8,045
11	KELLER HCW GMBH	59,428	61	F.M. SRL	7,953
12	ROBERT THOMAS METAL	58,661	62	NUOVA ALCE SRL	7,904
13	GRUPPO TECNOFERRARI SPA	54,827	63	SEEDEX SRL	7,653
14	BMR SPA	53,705	64	MARCHELUZZO SPA	7,544
15	SHENZHEN RUNTIANZHI DIGITAL EQUIPMENT	48,545	65	N B P SRL	7,520
16	CERATEC	46,306	66	TECKWIN TECHNOLOGY DEVELOPMENT CO.	7,353
17	TYROLIT VINCENT SRL	42,886	67	POPPI CLEMENTINO SPA	7,296
18	TAKASAGO INDUSTRY CO.,LTD.	42,194	68	MOLDE AZUL SL	7,270
19	SACMI IMPIANTI SPA	38,507	69	TREBAX SRL	7,249
20	TAKAHAMA INDUSTRY CO.,LTD.	37,830	70	CERINNOV, UNIPESSOAL, LDA	7,150
21	IN.TE.SA. SPA	36,804	71	CUCCOLINI SRL	7,039
22	I.C.F. & WELKO SPA	30,910	72	METALCERTIMA - INDUSTRIA	6,957
23	ADI SRL	30,691	73	BARCOM SRL	6,877
24	SABO S.A.	30,610	74	PROGETTI PLANT SRL	6,722
25	LUNA ABRASIVI SRL	30,520	75	NETZSCH ESPANA SA	6,721
26	GUANGDONG JUMPER THERMAL	29,357	76	CAMI DEPURAZIONI SRL	6,669
27	FUJIAN HAMUAN COMPOSITES TECHNOLO Y	27,946	77	SITEC SRL	6,580
28	PROJECTA ENGINEERING SRL	26,516	78	C.I.ME.S. SRL	6,515
29	ABRASIVI ADRIA SRL	25,999	79		6,364
30	KING-STRONG NEW MATERIAL TECHNOLOGY	24,612	80	B.C.R. SRL	6,345
31	CLEIA	24,593	81	LIALFORNI PESARO SRL	6,258
32	ANCORA SPA	24,375	82	I.G. MAC SRL	5,685
33	OFFICINA BOCEDI SRL	22,173	83	OFFICINA FERRARI CARLO SPA	5,669
34	GUANGDONG ZHONGYAO KILN COMPANY	22,172	84	STUDIO FAUTOMAZIONI INDUSTRIALI SRL	5,446
35	DROTTO AUTOMATION SPA	20,704	85		5,420
36	PROTEO ENGINEERING SRL	17,672	86	CHAIN NO MODANDOTTI A C COL	5,324
37	PONICIOANNI MACCHINE CDA	17,209	87	LIMITED SYMPOL SPI	5,262
38	OFFICIAL CALC SPI	17,204	88	TEK MAK CON	5,239
39	AID DOWNER CROUD CRA	17,037			5,095
40	SACMIMOLDS & DIES SDA	16,811 16,570	90	CIMA SPI	4,886 4,882
42	CENTECH SPA		92	INNOVA MAQUINIADIA INDUSTRIAL SI	
43	GAPE DUE SPA	15,112 14,685	93	CAPACCIOLI SPI	4,843 4,768
43	ITAL DIAMANT SDA	14,685	93	TECNIQUIT SPI	4,768
45	TECNO DIAMANT DIAMANTHINDUSTRIALI SPL	13,172	95	TALLEPES FOR SA	4,674
46	DONGGUAN LONGEY MACHINERY CO. LTD.	12,341	96	PICOTH SPI	4,626
47	MARPAK SPI	12,341	97	DIETER MODANDO SPI	4,432
48	LEIDIMETAL S.A.	12,278	98	S.C.P. STAMPI CEDAMICI POTECI IA SDI	4,330
49	UNIMAK MAKINA SAN VE TICAS	11,331	99	MAINCER SI	4,330
50	PREMIER SPI	10,508	100	REPAI MAR TECNOLOGIC SA	4,293
50		10,500	100		1 4,170

THE FINAL RANKING

After having classified all the companies by each indicator, here we present the final ranking 2020, calculated as an average of the other 12 rankings.

As stated at the beginning of this chapter, it should be noted however that the chosen indicators implicitly assign greater weight to the profitability and efficiency of management processes than to financial strength and equity structure.



CRIF	00																												
MORE	2	4	4	n	n	0	n	4	4	4	0	4	m	4	4	C	4	4		n	4	(2)	_	9	4	4	4	9	
PROFIT MARGIN	0	-	<u> </u>	9	00	\	7	19	10	0	0	100	9	4	7	17	30	20	50	28	21	34	10	25	20	Q	56	22	
EBIT	0	7	0	2	_	0	T	16	10	00	12	100	0	35	00	4	30	17	28	29	23	34	10	22	32	Ą	56	20	
EBITDA	0	2	00	9	13	7	20	00	16	14	10	32	4	23	0	27	35	29	30	158	3.	0)	24	34	45	_	39	17	
ADDED VALUE/SALES	<u></u>		00	34	13	37	147	00	147	4	24	32	Q	28	73	40	4	88	89	147	05	0)	66	54		147	£ 13	17	
GEARING	0	00	7		59	27	10	32	56	62	69	13	800	28	49	67	2	71	9	_	25	31	22	99	22	183	40	36	
EQUITY RATIO	4	00	<u> </u>	0)	2	12	20	26	000	73	300	22	4	20	46	29	52	90	24	24	22	10	8	45	84	101	32	30	
ROA	10	27	0	22	17	m	0	26	12	20	00	F	41	2	4	16	0	15		0	23	20	34	35	21	32	3	72	
ROS	2	-	_	10	0	-	2	16	10	n	00	9	17	36	00	14	30	100	50	34	25	40	0	23	200	4	26	22	
ROI	16	25	0	19	<u></u>	_	C)	20		41	24	22	45	20	00	10	00	9	LO	23	17	23	8	31	2	50	28	88	
ROE	47	62	48	9	37	8	0	41	23	13	27	14	73	22	0	12	10	100	0	28	52	88	25	43	F	17	49	97	
CASH FLOW	7	n	12	10	16	00	<u></u>	24	22	4	_	17	2	2	56	29	23	35	27	158	33	00	20	36	30	Ξ	4	48	
AVERAGE VALUE	6,6	12,2	12,6	14,2	15,3	15,5	24,6	20,3	26,8	21,8	20,8	21,2	22,5	22,5	23,5	24,1	26,3	28,2	28,1	9,03	29,6	30,0	32,9	33,2	33,2	40,3	35,8	35,9	
																			νΑν	TD.								O.	
COMPANY																													
NAME*																													
																									SMA SR				
RANKING	-	2	ည	4	2	9	<u> </u>	<u></u>	ა, თ	10	=	12	13	41	15 F	J 91	17	18	19	20	21 E	22	23 E	24	25 F	7 92	27	28	





Association of Italian Manufacturers of Machinery and Equipment for Ceramics



ACIMAC Research Department

studi@acimac.it www.acimac.it

MECS (Manufacturing Economic Studies) for **ACIMAC** info@mecs.org www.mecs.org

