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SACMA GROUP

GUIDE TO THE SYSTEM

HS ASPE




THE **WINNING TECHNOLOGIES**®

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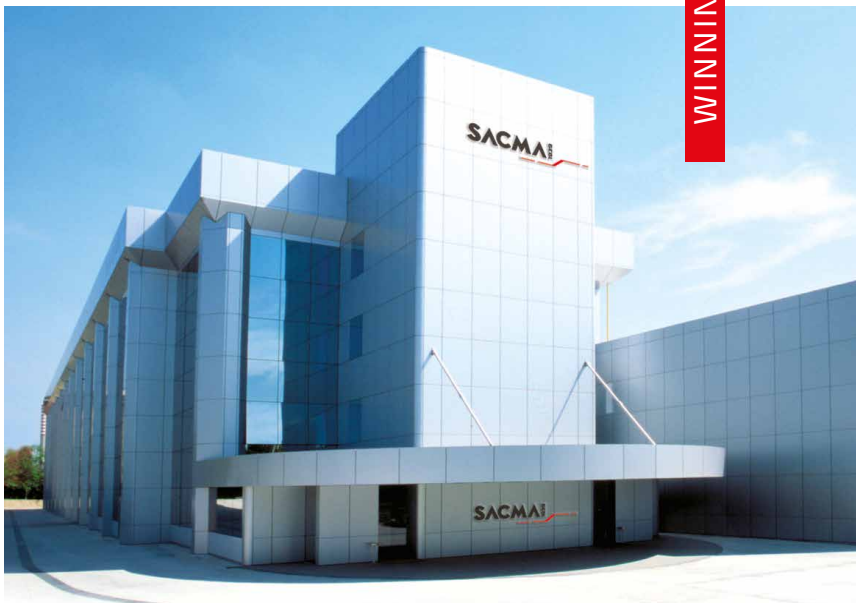
CNC AUTOMATIC LATHES

SACMA GROUP

WINNING TECHNOLOGIES®



CHOOSE EXCELLENCE TO MAKE THE DIFFERENCE

A constant focus on the future

Sacma Group is the ideal technology partner for the development and manufacturing of headers, thread rollers, CNC machines for post-heading and tapping operations, right through to loading and handling systems.

Customised, high-tech solutions to redefine the canons of excellence in the world of fasteners.

All the companies of the group are linked by a common philosophy and processes that allow each component to be designed and manufactured in-house. A choice that makes the difference.

THE **WINNING TECHNOLOGIES®**

- FORMING / HEADING
- ROLLING / THREADING
- TAPPING / MACHINING
- LOADING / MOVING

- 5 Production Sites
- 24 Sales Agencies
- 5 Sales & Technical Service Centers

Welcome to the Sacma world
so much more than just numerous dots on a map.

Our company is an international strategic network with technical centers in the USA, China, Taiwan, and Brazil, and a growing sales network across 18 countries. We have a strong presence in key European markets as well as in regions such as Canada, Argentina, Japan, India, Iran, and South Korea. Because truly being there means being reliable, not just visible.

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Every industry follows a unique path, shaped by challenges, ambitions, and constant change. Sacma is always there with machines designed to turn ideas and projects into reliable, long-lasting components. Our know-how, born from experience and vision, allows us to provide solutions that adapt to every need and support manufacturers worldwide in achieving excellence.

SECTORS

- AUTOMOTIVE OEM
- AUTOMOTIVE TIER ONE
- AEROSPACE
- INDUSTRIAL VEHICLES
- CONSTRUCTION
- ELECTRONICS
- WHITE GOODS
- AMMUNITION AMTEC
- OTHERS

HS ASPE

FORMING / HEADING
ROLLING / THREADING
TAPPING / MACHINING
LOADING / MOVING

HS ASPE provides a complete range of automatic machines dedicated to tapping and complex secondary machining for manufacturers of fasteners and special workpieces on a small, medium or large scale. The automatic tappers (based on the principle of the reversible spindle) and the flexible CNC machines, all made by us to the MADE IN ITALY standard, are part of a wide selection of solutions that cover every secondary machining requirement that component manufacturers are facing nowadays and which will be increasingly requested in the future. HS ASPE works alongside its customers to choose the most suitable machine for their needs.

UNI EN ISO 9001:2015

ISO 14001

ISO 45001

TECHNICAL DEPARTMENT

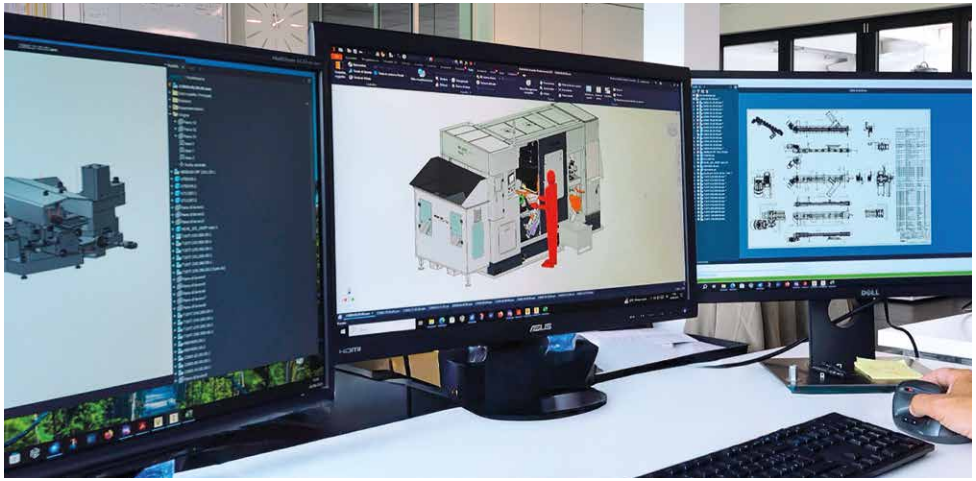
This is the mind and the design core of HS ASPE. It's from here, in synergy with the Programming Department, that the great daily challenges of the company begin.
Knowing how to go further is the mission of our specialists, who are dedicated to conceiving and designing components and machines according to the specific needs of each customer: from engineering to production, to the single production program.

QUALITY

For HS ASPE, testing is the crowning achievement of a cycle: for this reason, the most rigorous quality evaluation parameters are applied to every single mechanical and electronic assembly phase.

CO-ENGINEERING

All companies say they are customer-orientated. Actions speak louder than words though, and in fact we are constantly investing in a global presence via the exclusive service of technical design to develop new tailor-made solutions for second-stage operations on pre-formed workpieces. This means not only being able to create ever more complex products but also to identify - together with the customer - the best solutions to industrialise them in the most efficient way.



ASSEMBLY DIVISION

From the design of the single pieces, the machine takes shape via assembly procedures standardised by means of an excellent quality process. HS ASPE has optimised its techniques for the pre-assembly of sub-units and the entire assembly of the machines according to their type and size.

WAREHOUSE STORAGE AND LOGISTIC

Storage warehouse: a nerve centre that attracts significant investment, as demonstrated by infrastructure such as the new depot.
With so many different models produced and so many individual components, HS ASPE has to organise its stock around the highest standards of logistics quality and efficiency.
Organisational speed and capacity at the customer's service: this is the key to the storage warehouse.

AUTOMATIC TAPPING MACHINES

Automatic tapping machines are based on the reversible spindle system, mechanically guided by a lead screw or electronically managed synchronised motors. All the internal threads, of any pitch (from M2 to M36), can be produced with standard male taps, either by rolling or with chip removal. The machines are based on a modular system that enables the installation of one single spindle or a twin spindle with two independent work stations. For the best flexibility, it is also possible to work two different pieces simultaneously on two fully independent work stations. The precision of the operations is ensured by the locking/positioning of the workpiece and the rigidity of the bed frame, to produce perfect orthogonality and excellent concentricity. For maximum productivity with a configuration that sees 4 spindles working at the same time, the tapping rate is up to 200 ppm.

CHARACTERISTICS		**T10**	**T10-S**	**T10-HC**	**T20**	**T20-HC**	**T30**	**T30-HC**
CONCEPT		TAPPING	TAPPING	TAPPING High Cap.	TAPPING	TAPPING High Cap.	TAPPING	TAPPING High Cap.
DRIVING TYPE		Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical
WORKING AXIS	Type	60°	60°	60°	60°	60°	60°	60°
CHARACTERISTICS								
Spindles	Nr.	2	2	4	2	4	2	4
Working stations	Nr.	2	1	2	2	2	2	2
Tapping range		M3 - M10	M3 - M10	M3 - M10	M10 - M20	M10 - M20	M16 - M30	M16 - M30
BLANK								
Max. OD	mm	ø 40	ø 30	ø 30	ø 40	ø 40	ø 50	ø 45
Max. Length	mm	50	50	50	60	60	70	70
MACHINE								
Control	PLC	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
Spindle speed range	rpm	0 - 3500	0 - 3500	0 - 3500	0 - 2000	0 - 2000	0 - 2000	0 - 2000
Production Speed up to	ppm	90	90	180	80	160	60	120
Net mass	kg	2500	2000	3500	2800	4000	3500	4500

T10

T10-S

T10-HC

T20

T20-HC

T30

T30-HC

VERTICAL TAPPING MACHINES

The design of the VT tapping machines, made for large-scale production, with a vertical working station, ensures precise and continuous part feeding. Feeders, guides, and worktable are arranged horizontally to guarantee maximum operational efficiency.

CHARACTERISTICS		VT10	VT20
CONCEPT		TAPPING High Cap.	TAPPING High Cap.
DRIVING TYPE		Electronic	Electronic
WORKING AXIS	Type	Vertical	Vertical
CHARACTERISTICS			
Spindles	Nr.	4	4
Working stations	Nr.	1	1
Tapping range		M4 - M10	M10 - M20
BLANK			
Max. OD	mm	ø 40	ø 45
Max. Length	mm	50	60
MACHINE			
Control	PLC	Siemens	Siemens
Spindle speed range	rpm	0 - 5000	0 - 3000
Production Speed up to	ppm	200	180
Net mass	kg	4500	5000

VT10

VT20

AUTOMATIC COMBINED MACHINES

The combined machines are used to carry out further operations in addition to the tapping - for instance boring, reaming, edge trimming and chamfering. With each cycle, the workpiece undergoes various secondary operations at the same time, enabling high production rates with excellent flexibility. To obtain the best productivity, modules with 2, 3 or 4 machining units can be installed.

CHARACTERISTICS		HDT12-S	HDT20-S	HDT12	HDT20	HDT-TRANSFER
CONCEPT		DRILLER TAPPER	DRILLER TAPPER	DRILLER TAPPER	DRILLER TAPPER	TRANSFER
DRIVING TYPE		Electronic	Electronic	Electronic	Electronic	Electronic
WORKING AXIS	Type	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
CHARACTERISTICS						
Spindles	Nr.	3 Front + 1 Rear	3 Front + 1 Rear	2 Front + 2 Front	2 Front + 2 Front	4 Front + 2 Rear
Working stations	Nr.	1	1	2	2	1
Part Clamping system	Type	Hydraulic	Hydraulic	Hydraulic	Hydraulic	Self centering chucks
OPERATIONS						
Drilling	mm	ø 3,5 - ø 12	ø 8 - ø 20	ø 3,5 - ø 12	ø 8 - ø 20	ø 3,5 - ø 22
Tapping	mm	M4 - M12	M10 - M20 (M24)	M4 - M12	M10 - M20 (M24)	M4 - M24
Other Machining Operations	mm					X
BLANK						
Max. OD	mm	ø 40	ø 40	ø 40	ø 40	ø 50
Max. Length	mm	50	50	50	50	130
MACHINE						
Control	PLC	Siemens	Siemens	Siemens	Siemens	Siemens
Spindle speed range	rpm	0 - 6000 (13.000*)	0 - 6000	0 - 6000 (13.000*)	0 - 6000	0 - 6000
Net mass	kg	3500	3700	4200	4200	6000

HDT12-S

HDT20-S

HDT12

HDT20

HDT-TRANSFER

VERTICAL COMBINED MACHINES

VDT vertical machines feature four controlled spindles allowing drilling and/or tapping 2 or 4 parts simultaneously, boosting flexibility and productivity.

CHARACTERISTICS		VDT10			VDT20		
CONCEPT		DRILLING TAPPING	ONLY DRILLING	ONLY TAPPING	DRILLING TAPPING	ONLY DRILLING	ONLY TAPPING
DRIVING TYPE		Electronic			Electronic		
WORKING AXIS	Type	Vertical			Vertical		
TECHNICAL DATA							
Spindles -Tapping	Nr.	2		4	2		4
Spindles - Drilling	Nr.	2	4		2	4	
Working stations	Nr.	1	1	1	1	1	1
Drilling range	mm	ø3,5-ø10	ø3,5-ø10		ø10-ø20	ø10-ø20	
Tapping range	mm	M4-M10		M4-M10	M12-M20		M12-M20
BLANK							
Max. OD	mm	ø 40			ø 45		
Max. Length	mm	50			60		
MACHINE							
Control	PLC	Siemens			Siemens		
Spindle speed range	rpm	0 - 6000	0 - 6000	0 - 6000	0 - 3000	0 - 3000	0 - 3000
Production Speed up to	ppm	tbd	tbd	200	tbd	tbd	180
Net mass	kg	5000			5500		

VDT10

VDT20

CNC AUTOMATIC LATHES

The range of CNC secondary machining lathes provides a new concept of "machine" that meets the needs of secondary piece machining and high added value. A complete range that includes three types of machine based on the logic of rotating workpieces with multiple simultaneous operations: Single Spindle, Double Spindle and Multi Spindle (4 spindles) with a rotating drum.

CHARACTERISTICS		TSS-42	TDS-42	TMS-42
CONCEPT		TURNING - SINGLE SPINDLE	TURNING - DOUBLE SPINDLE	TURNING - MULTI SPINDLE
Simultaneous Feeding / Discharging				•
Simultaneous Machinings		•	•	•
Both sides Machining			•	
TECHNICAL DATA				
Working stations	Nr.	1	2	1 Drum
Spindles	Nr.	1	2	3 Machining + 1 Feeding / Discharging
Spindle power (max.)	kW	10,5	10,5	10,5
Spindle torque (max.)	Nm.	18	18	18
Spindle Nose	Type	ASA 5	ASA 5	ASA 5
Tailstock		•	•	
Tools	Nr.	Radial 3 | Axial 2	Radial 6 | Axial 4	Axial 6
BLANK				
Max. OD	mm	ø 42	ø 42	ø 42
Max. Length	mm	150	150	80
MACHINE				
Control	PLC/CNC	Siemens	Siemens	Siemens
Spindle Speed range	rpm	0 - 6.000	0 - 6.000	0 - 6.000
Net mass	kg	2.500	3.500	4.000

TSS-42

TDS-42

TMS-42

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