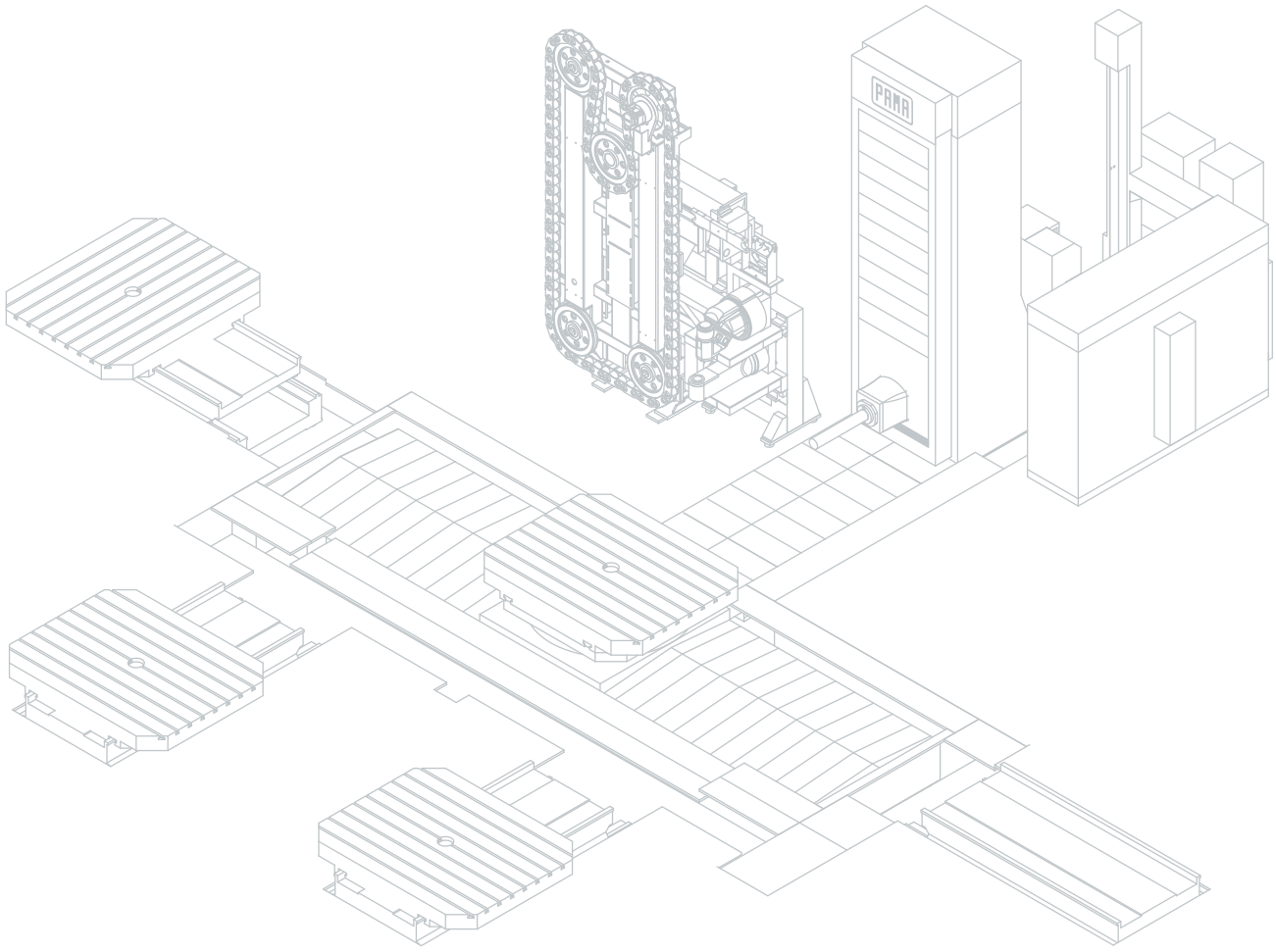
PAMA

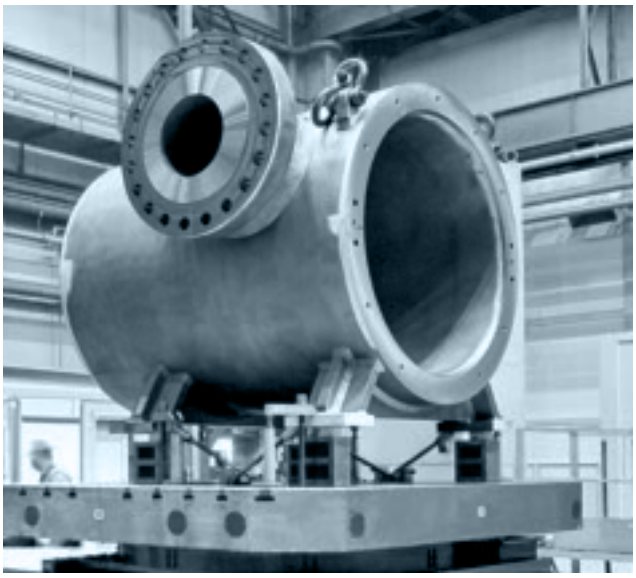


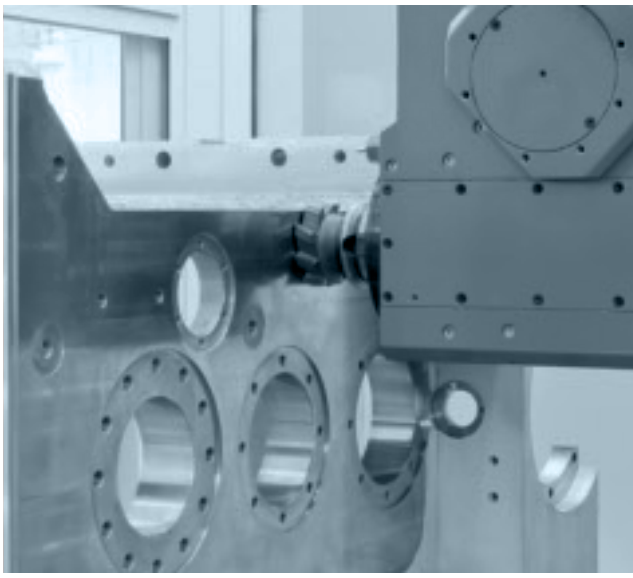
SPEEDMAT

BORING AND MILLING CENTERS

TARGET AND APPLICATION

AEROSPACE
ENERGY
EARTH MOVING
OIL & GAS
GENERAL MACHINING



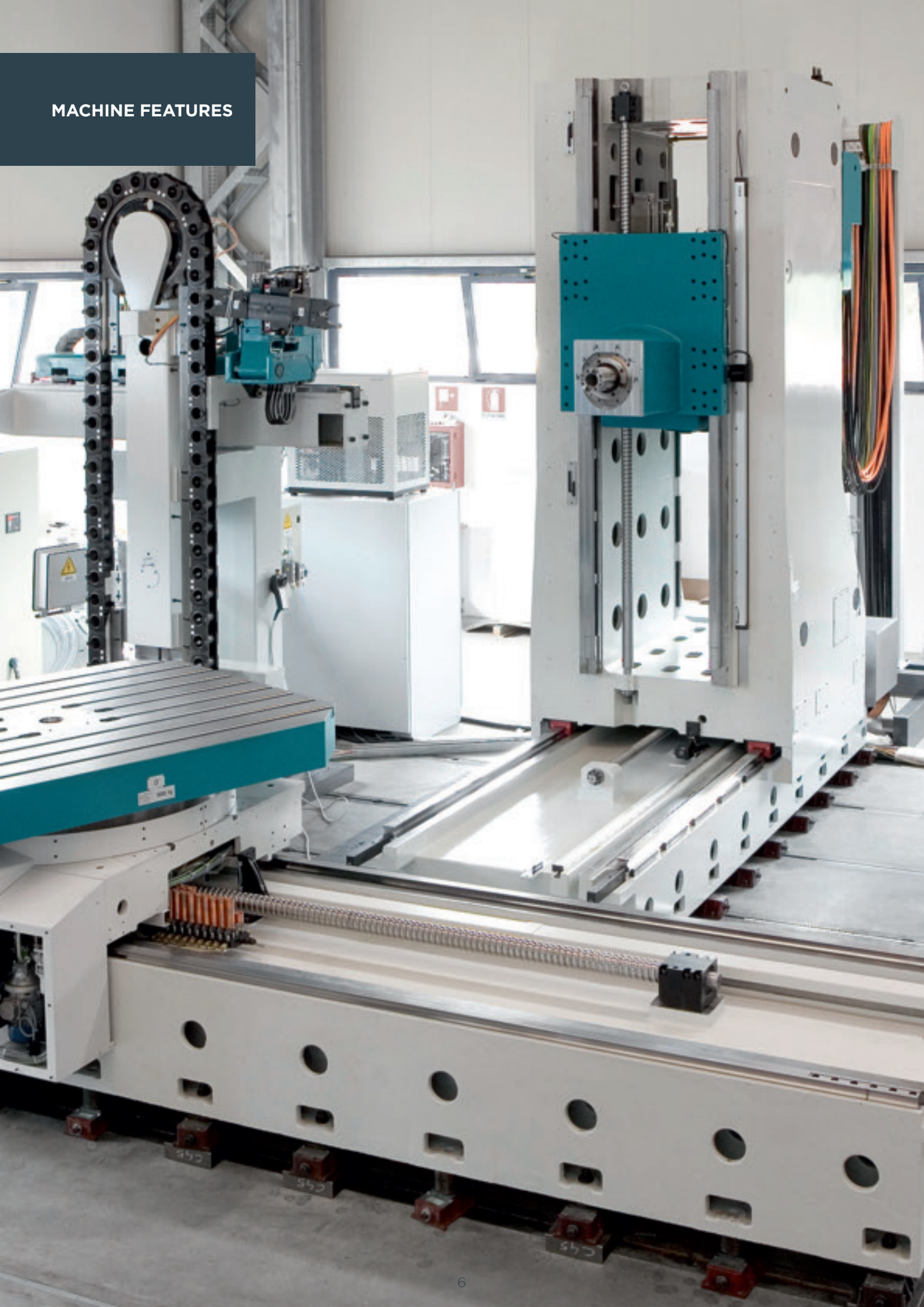


Speedmat technology is the perfect solution for all the most demanding machining applications requiring precise boring.

the Speedmat series consists of four base models with:
boring spindle diameter of 130 or 160 mm
pallet sizes from 1250 x 1250 mm up to 2000 x 2500 mm
with maximum table load capacity from 10 to 25 t (metric ton)
maximum work piece swing diameter from 2600 to 4600 mm

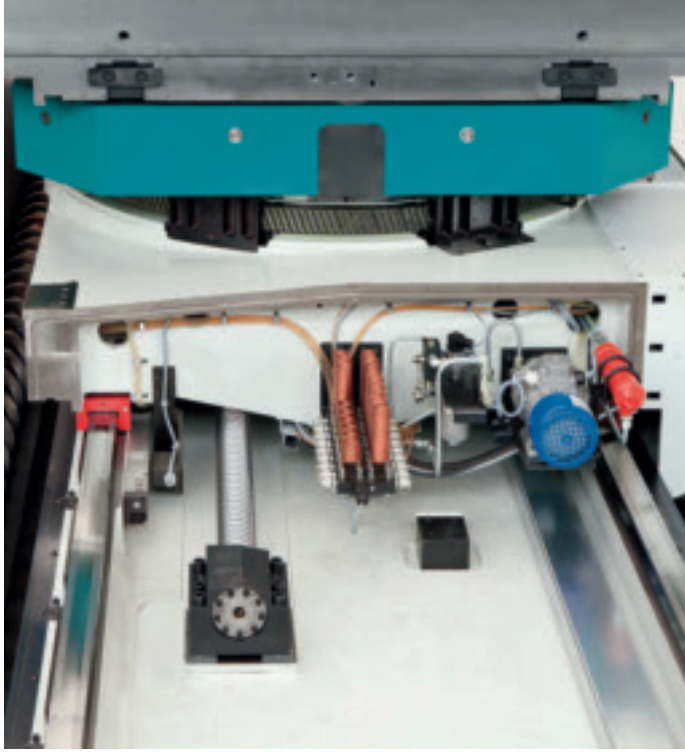
BORING AND MILLING CENTERS

MACHINE FEATURES

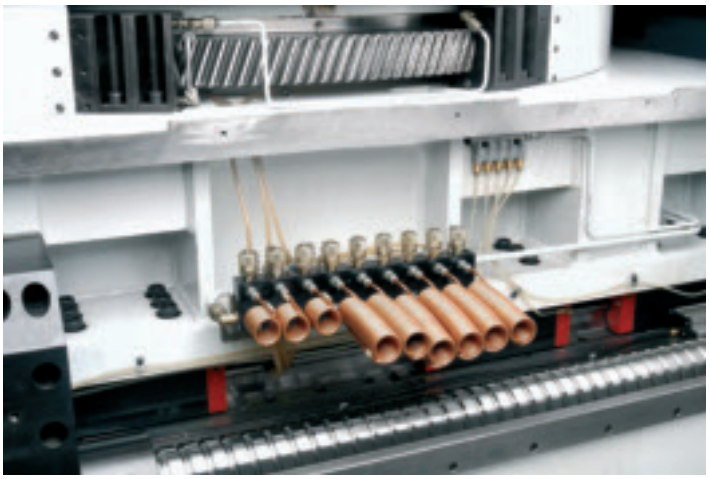


thermo-symmetric structure with headstock located in central position for maximum accuracy

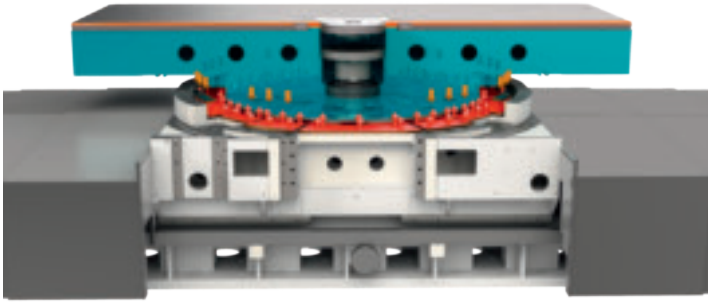
all main components are cast iron for maximum rigidity and dampening. T-type configuration for column cross movement



Large size linear roller guideways to provide high rapid traverse rate as well as maximum rigidity on all linear axes

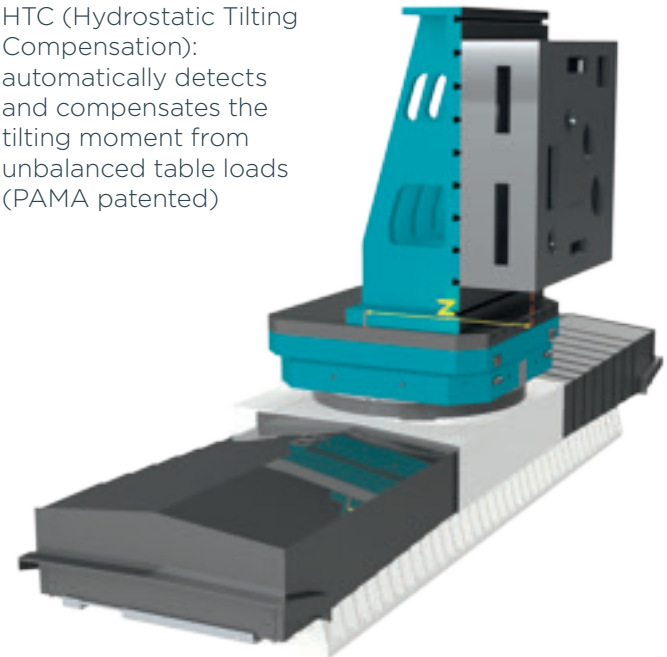


fully hydrostatic contouring table driven by a bull gear and double pinion system (preloaded for backlash free operation)



hand scraped and fully hydrostatic contouring tables allows for optimal simultaneous 4 and 5 axes precision machining

HTC (Hydrostatic Tilting Compensation): automatically detects and compensates the tilting moment from unbalanced table loads (PAMA patented)



B axis is driven via bull gear and double pinion system (preloaded for backlash free operation)

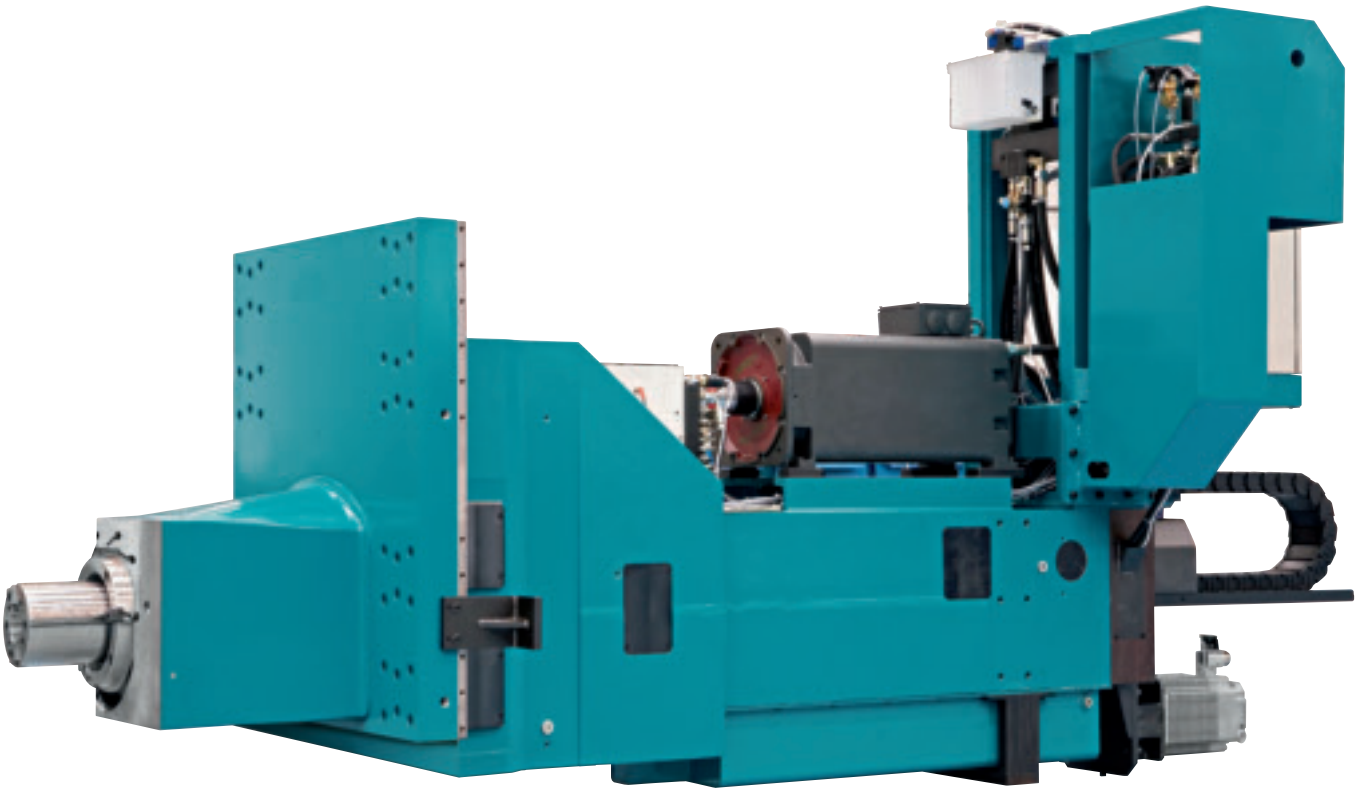
HTC (Hydrostatic Tilting Compensation): automatically detects and compensates the tilting moment from unbalanced table loads (PAMA patented)

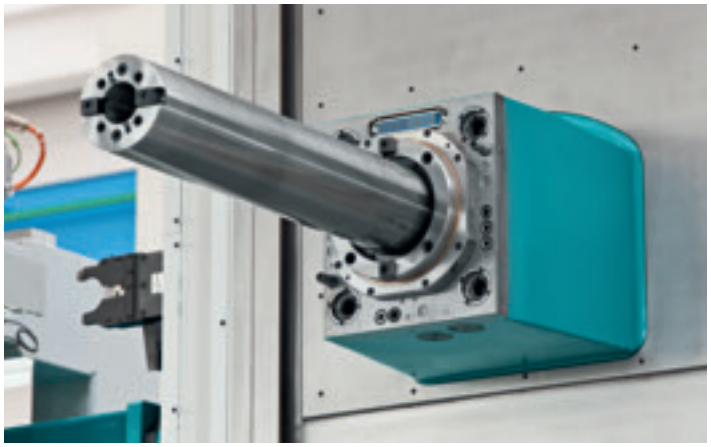
PTB (PAMA Thrust Bearing): full hydrostatic table axial bearing

MACHINE FEATURES

MACHINE FEATURES

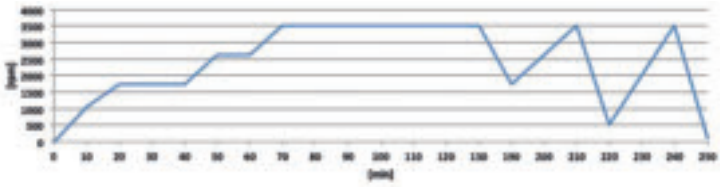
monolithic casting boring spindle headstock centrally mounted in a thermo symmetrical column



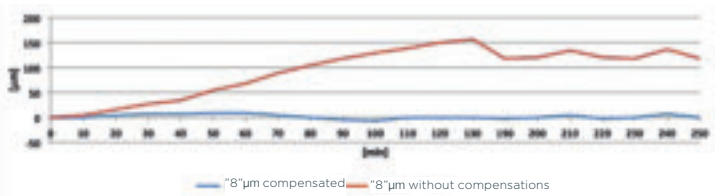


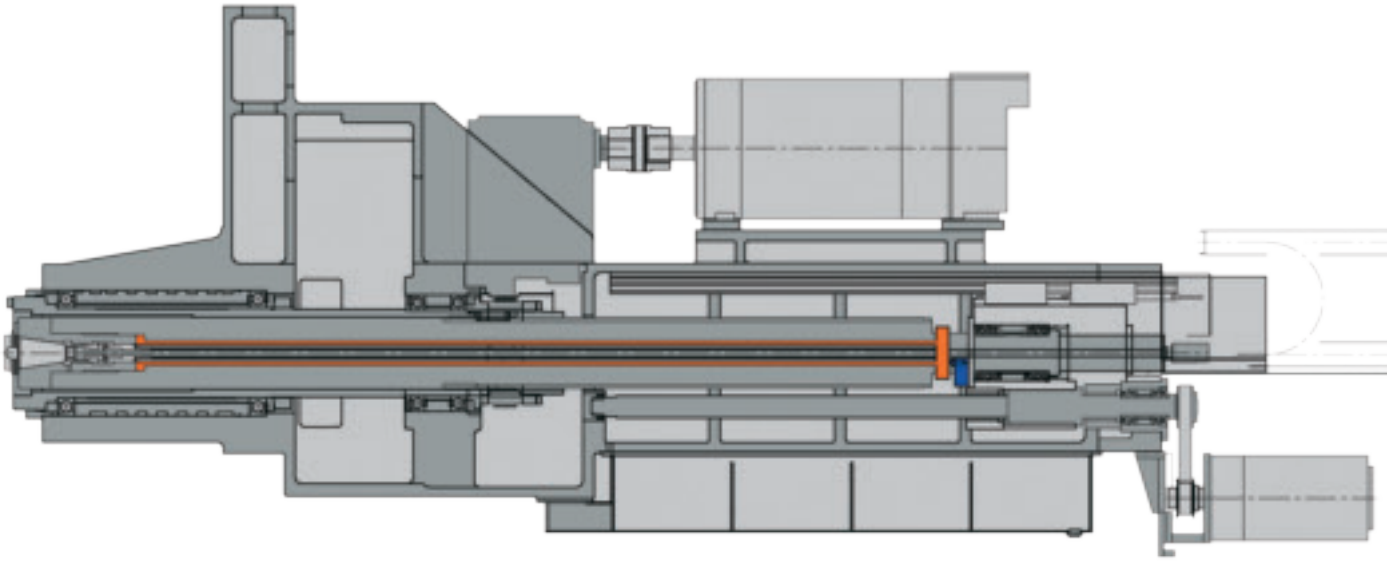
boring spindle with stroke of 800 mm available in 130 mm or 160 mm diameter

spindle speed



boring bar nose displacement

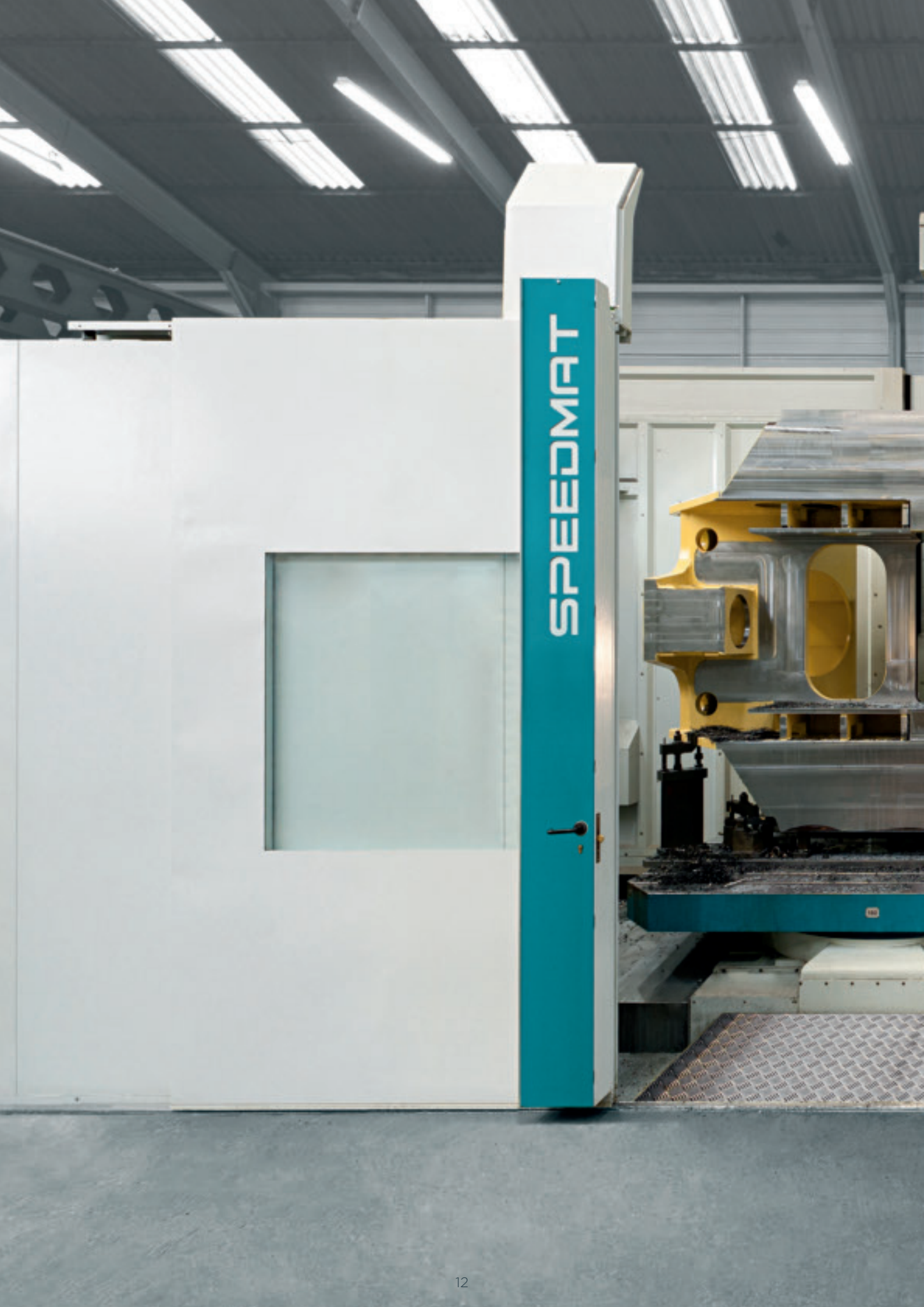




ATC (Automatic Thermal Compensation):
Real time CNC controlled compensation system of boring spindle thermal elongation , by physical direct measurement (option)

the spindle powertrain includes a particularly silent and robust 2 speed ranges gearbox with hardened and ground gears, maintained at constant temperature by internal recirculation of thermally-controlled oil

ATC (Automatic Thermal Compensation): real time CNC controlled exclusive compensation of ram and spindle elongation / contraction by direct measurement (PAMA patents)


SPEEDMAT

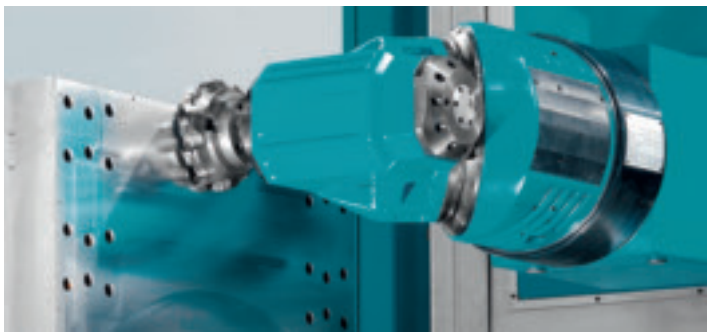

PAMA
PAMA

HEAD ATTACHMENTS

UT
facing heads

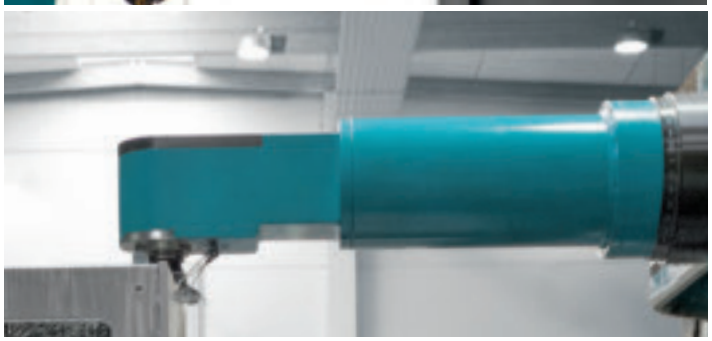
TS
right angle milling heads

TU
indexable universal milling heads



TTL
right angle indexing universal heads

customized solutions
any special head required to solve specific technological problems



CSH (Clever Sensored Heads): equipped with temperature and acceleration sensors, allows for continuous head monitoring and predictive maintenance

AHC (Automatic Head Calibration): automatic verification of head geometry and adjustment of offset parameters

PMP (PAMA Maintenance Program): software system reminds operators and maintenance personnel of scheduled PM activities

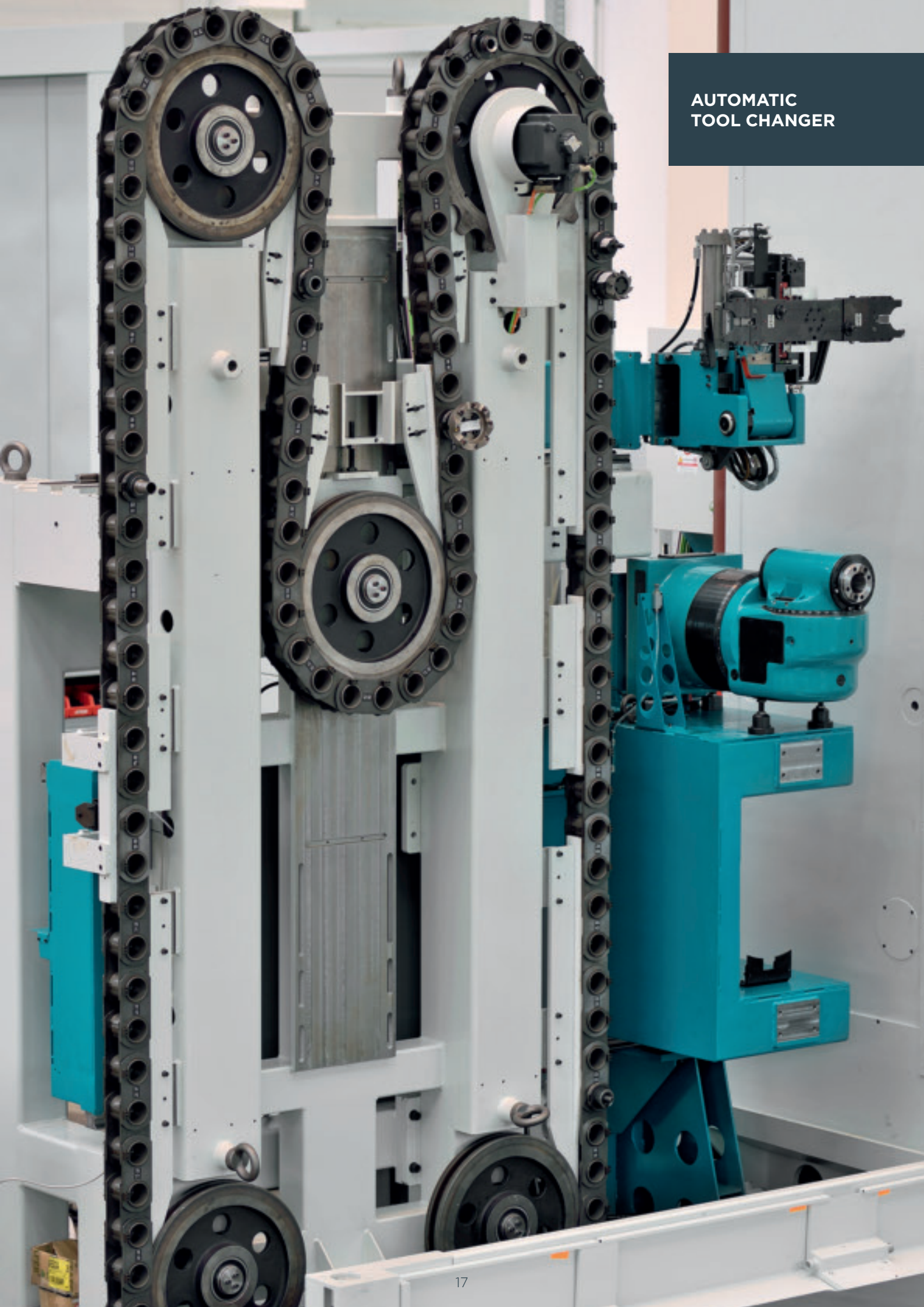
ATTACHMENT CHANGER

Speedmat can be equipped with different type of automatic tool changer and magazine in order to fulfill any customer need.

the versatility of Speedmat can be further enhanced by a wide range of head attachments

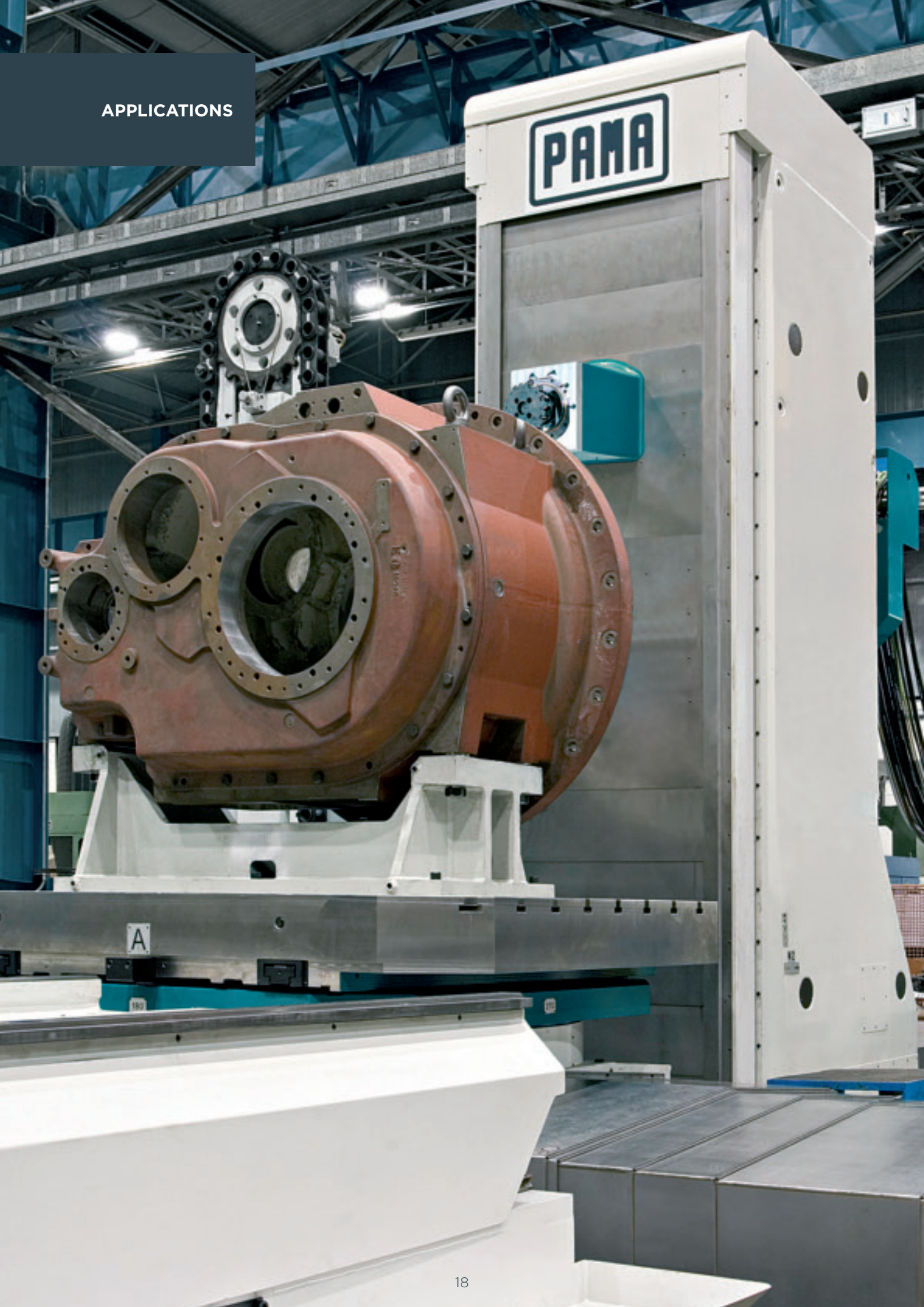
PMP (PAMA Maintenance Program): software system reminds operators and maintenance personnel of scheduled PM activities

PR2 (Predictive Production Management): optimize the efficiency and the saturation of the production system



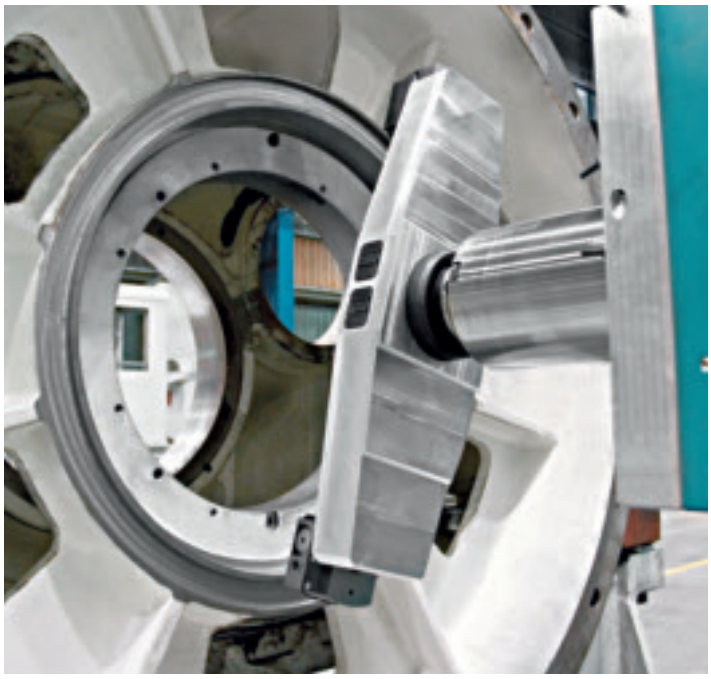
AUTOMATIC TOOL CHANGER

APPLICATIONS

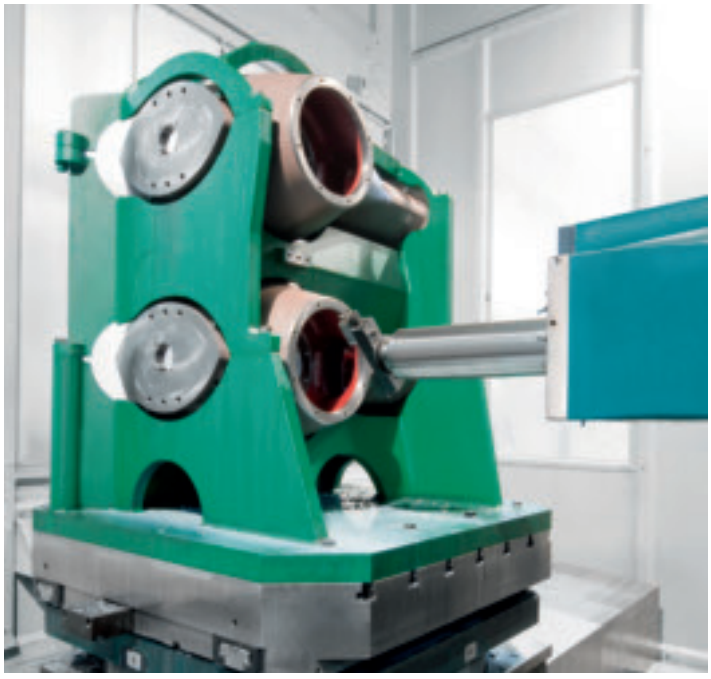


Speedmat technological innovations, developed upon PAMA sound tradition and experience, guarantee the highest machining accuracy

hydraulic press



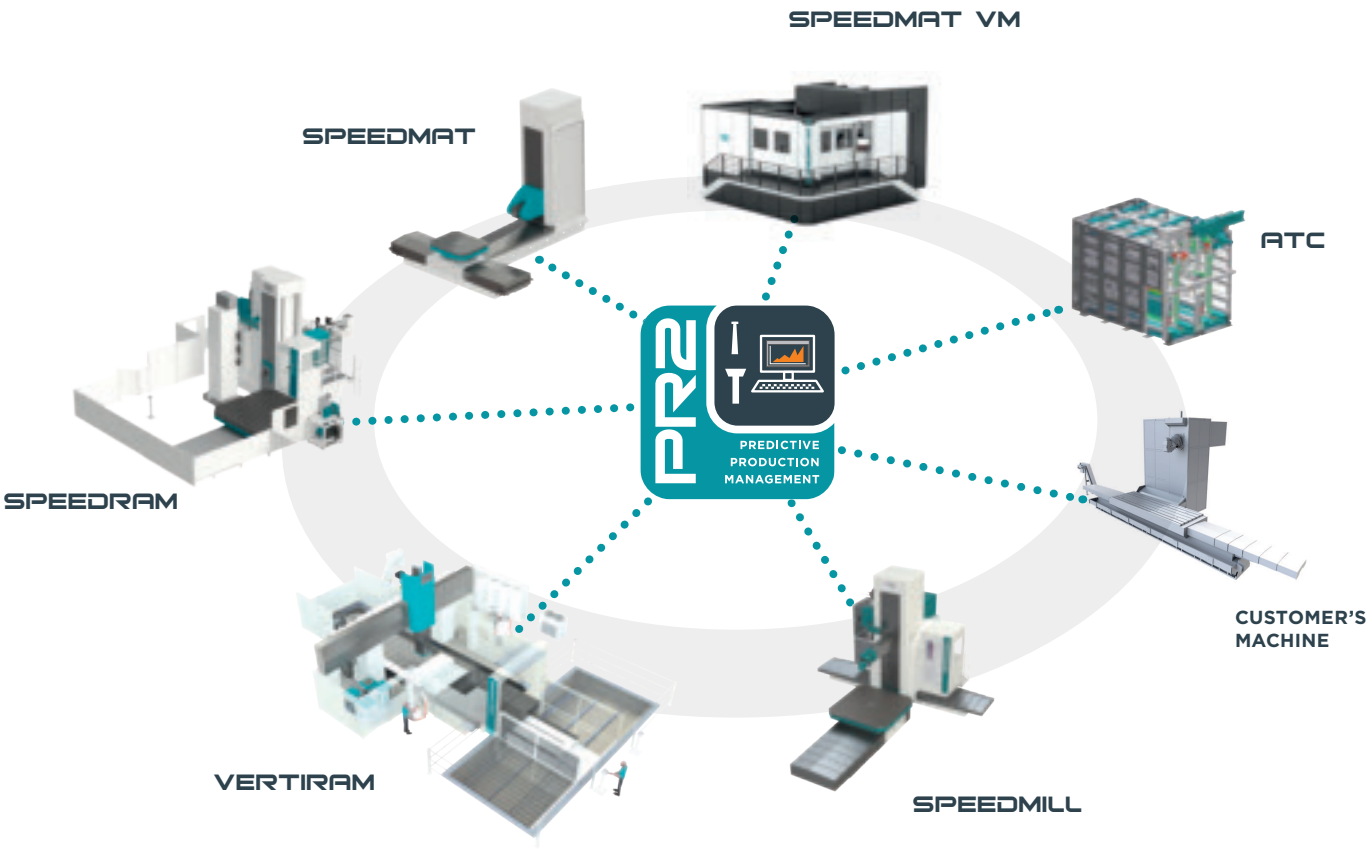
gear box for
wind power generator



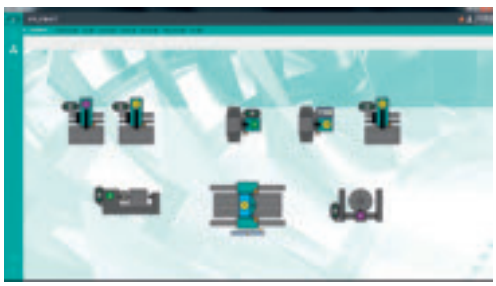
gear housing
for marine thruster

PR2 SUITE

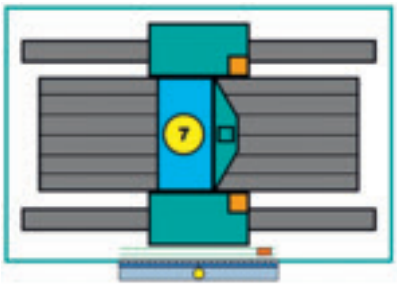
a general purpose framework, integrated with software applications, created by PAMA with the aim to bring our clients to a higher level of efficiency and profit.
thanks to its great intuitive user interface it allows to manage the production unit in real time with predictive approach in manned or unmanned condition.



complete reporting of production unit activities



efficient managing of complex units (even with compatible customer's machines)

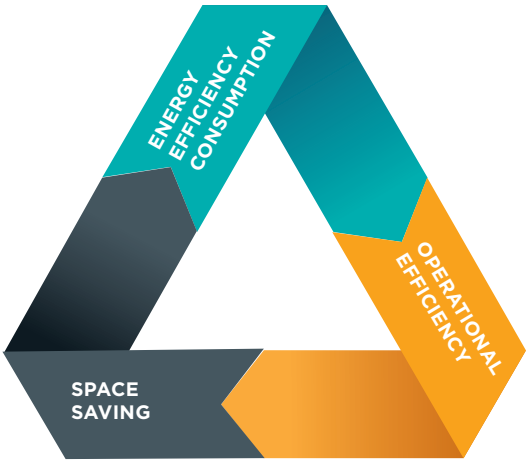


efficient managing of single production unit

PR2 (Predictive Production Management): optimize the efficiency and the saturation of the production system

PAMA GLOBAL EFFICIENCY

Energy saving: low friction guides, use of direct drive technology, regenerating drives, intelligent use of all auxiliary units



Space saving: compact design, wide choice of tool changer, pallet changer and chip conveyors

Operational efficiency: multitasking configuration, machine reliability, PMP preventive maintenance software, MSM machine sensor monitoring and predictive maintenance, PR2 suite to optimize the efficiency and the saturation of the production system

PGE (PAMA Global Efficiency): energy saving, space saving, operational efficiency

Easy maintenance, combined with predictive maintenance, is a must for an efficient workshop management.

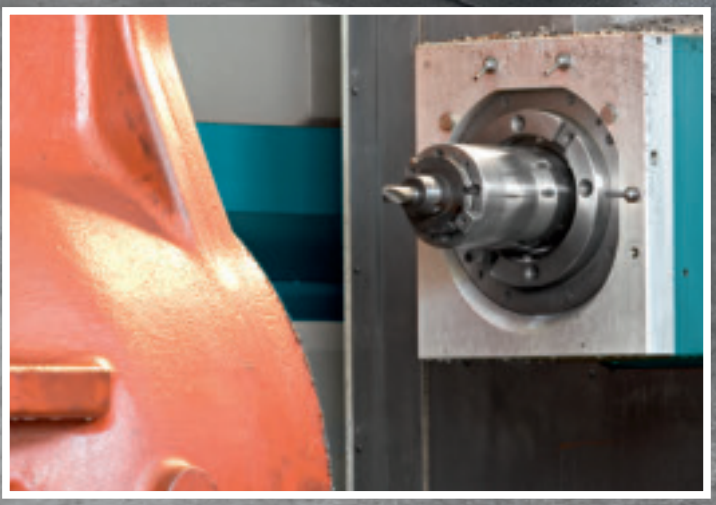
Piping, wiring and components location are studied for easy visual inspection at a glance.

PMP (Pama Maintenance Program): remainds operators and maintenance personnel of scheduled preventive maintenance activities via messages, alarm and or icons permanently displayed on the CNC screen.

PMP (PAMA Maintenance Program): software system reminds operators and maintenance personnel of scheduled PM activities

MSM (Machine Sensor Monitoring): temperature and acceleration sensors for continuous machine monitoring and predictive maintenance

BORING AND MILLING CENTERS




SPEEDMAT
SPEEDMAT

SPEEDMAT

		2600/10	3000/10
WORKING AREA			
X axis (table)	mm	2600	3000
Y axis (headstock)	mm	2000 / 2500	2000 / 2500
Z axis (column)	mm	2300 / 2700	2300 / 2700
W axis (boring spindle)	mm	800	800
Max. swing diameter	mm	2600	3000
TABLES			
Table sizes	mm	1400 x 1600	1400 x 1600
Table capacity	t*	10	10
Pallet size	mm	1250 x 1250	1250 x 1250
	mm	1250 x 1600	1250 x 1600
Pallet capacity	t*	8	8
AXIS FEEDS			
X axis rapid traverse/feed rate	m/min	25	25
Y,Z,W rapid traverse/feed rate	m/min	25	25
B axis feed rate/rapid traverse	rpm	5	5
HEADSTOCK W130			
Boring spindle diameter	mm	130	130
Max spindle speed	rpm	4000	4000
Spindle speed ranges		2	2
Max spindle power (S1)	kW	37	37
Max spindle torque (S1)	Nm	1530	1530
HEADSTOCK W150 / W160			
Boring spindle diameter	mm	150 / 160	150 / 160
Max spindle speed	rpm	3500	3500
Spindle speed ranges		2	2
Max spindle power (S1)	kW	52	52
Max spindle torque (S1)	Nm	2396	2396

* t in metric ton

3000/16	3800/16	3800/25	4600/25
3000	3800	4000	5000
2000 / 2500	2500 / 3000	2500 / 3000	2500 / 3000
2300 / 2700	2700	2700	2700
800	800	800	800
3000	3800	3800	4600
1800 x 2200	1800 x 2200	2000 x 2500	2000 x 2500
16	16	25	25
1600 x 1600	1600 x 1600	2000 x 2000	2000 x 2000
1600 x 2000	1600 x 2000	2000 x 2500	2000 x 2500
12	12	20	20
25	25	20	20
25	25	25	25
4	4	3	3
130	130	130	130
4000	4000	4000	4000
2	2	2	2
37	37	37	37
1530	1530	1530	1530
150 / 160	150 / 160	150 / 160	150 / 160
3500	3500	3500	3500
2	2	2	2
52	52	52	52
2396	2396	2396	2396

Grafiche Antiga spa
08/22

PAMA SPA
Viale del Lavoro, 10
I-38068 Rovereto (TN)
ITALY
Sales:
Tel. (+39) 0464 455 511
Fax (+39) 0464 438 609
sales@pama.it
www.pama.it
Service:
Tel. (+39) 0464 455 603
Fax (+39) 0464 438 609
service@pama.it

PAMA TECHNOLOGY CENTER ROVERETO
Viale del Lavoro, 10
I-38068 Rovereto (TN)
ITALY
Tel. (+39) 0464 455 511

PAMA INC.
890 Tollgate Rd.
Elgin, IL 60123-9300
USA
Sales:
Tel. (+1) 847 608 64 00
Fax (+1) 847 695 46 76
info@pama.us
www.pama.us
Service:
Tel. (+1) 847 608 64 00
Fax. (+1) 847 695 46 76
service@pama.us

PAMA DO BRASIL LTDA
Rua Antonio Carlos de Barros Bruni 119
Jardim Nova Manchester
CEP 18052-017 Sorocaba SP
BRAZIL
Sales:
Tel. (+39) 0464 455 511
sales@pama.it
Service:
Tel. (+39) 0464 455 603
service@pama.it

PAMA GMBH WERKZEUGMASCHINEN
Am Saegewerk 5b
D-55124 Mainz
GERMANY
Sales:
vertrieb@pama.de
Tel. (+49) 6131 600 72 61
Fax (+49) 6131 600 72 68
www.pama.de
Service:
Tel. (+49) 6131 600 72 60
Fax (+49) 6131 600 72 68
service@pama.de

PAMA MACHINE TOOLS INDIA (P) LTD.
106, Vascon Garnet Bay,
Nagar Road, Viman Nagar
Pune 411014,
INDIA
Sales/Service:
Tel. (+91) 020 6721 3802
pama.india@pamaindia.com

PAMA FRANCE
Les Forques
F - 46320 Livernon
FRANCE
Tel. +33 (0) 9.67.60.04.72
Mob. +33 (0) 6.12.45.49.88
pama.france@orange.fr

PAMA (Shanghai) Machine Tool Co.,Ltd
Sales Department
帕马(上海)机床有限公司 – 销售部
Room 803, Building B, Venture International Park,
2679 Hechuan Road, Minhang
District, Shanghai 201103
上海市闵行区合川路2679号虹桥国际商务广场B座8楼803室
电话(Tel):021-60761998
传真(Fax):021-64481282
邮箱(Email):info@pama.cn
网址(Web):www.pama.cn

PAMA SERVICE, OOO
Vyborgskaya Nab., 61,
lit. A, office 326
197342 Saint-Petersburg
RUSSIA
Tel.: +7 812 309 24 44
Tel./Fax: +7 812 309 21 26
info@pamaservice.ru

PAMA (Shanghai) Machine Tool Co.,Ltd
帕马(上海)机床有限公司
358 Feizhou Road, Pudong New District,
Shanghai 201306
上海市浦东新区飞舟路358号
电话(Tel):021-60450488
传真(Fax):021-60450108
邮箱(Email):service@pama.cn
网址(Web):www.pama.cn

PAMA has a policy of continuous improvement of its products and reserves the right to change materials and specifications without notice

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001 =