



- Eight-spindle automatic lathe of the highest quality
- High accuracy at mass and series production
- High rigidity at machining
- SIMATIC S 7 programmable logic controller
- Controlled feed and spindle motors
- High thermal and dynamic stability
- Version for machining of bars of max. dia 32 mm and 42 mm
- Machine version with general stop of spindles
- Machine conforms to the 89/392 EEC directive

# EIGHT-SPINDLE AUTOMATIC LATHE

# MORI-SAY 832AC

The first and the most successful representative of the contemporary generation of the cam multi-spindle automatic lathes manufactured in the TAJMAC-ZPS. It is intended for the mass and series production of precise components from the bar stock.

## CONSTRUCTION

Conception characteristics is the high accuracy and rigidity at machining

8 spindles – usage of the collets of the max. clamping dia of 32 mm and 42 mm

8 cross slides

4 compound slides in the 1<sup>st</sup>, 2<sup>nd</sup>, 5<sup>th</sup> and 6<sup>th</sup> stations

8 independent longitudinal slides

Hardened slide-ways of all slides

Arrestment of the spindle drum by a triad of rims with spur gearing

Adjustable centre block of longitudinal slides for the machining of very long parts

PLC SIEMENS, display for programming and diagnostics of machine functions

Absolute angular sensing device with programmable outputs – mini controller

Variable speed motor for feeds

Work space lighting by fluorescent lamps

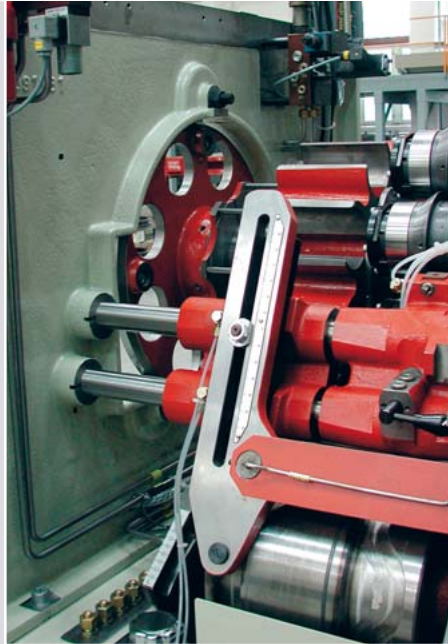
Automatic two-circuit central lubrication

Attachment for the cooling of cutting tools

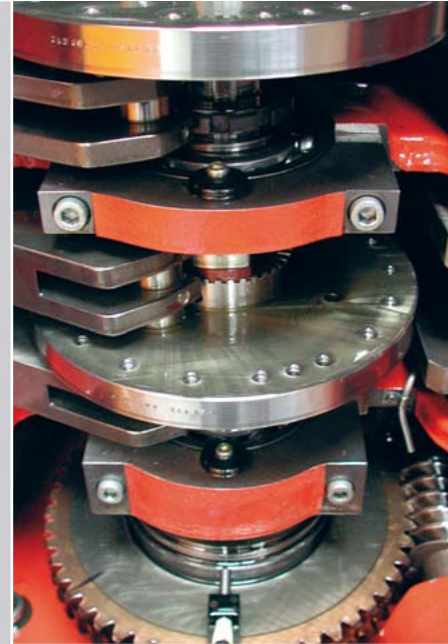
Basic set of cams for longitudinal and cross slides

Machines of the "S" version are equipped with a device for the general stop of spindle enabling the machining without rotation of the machined part

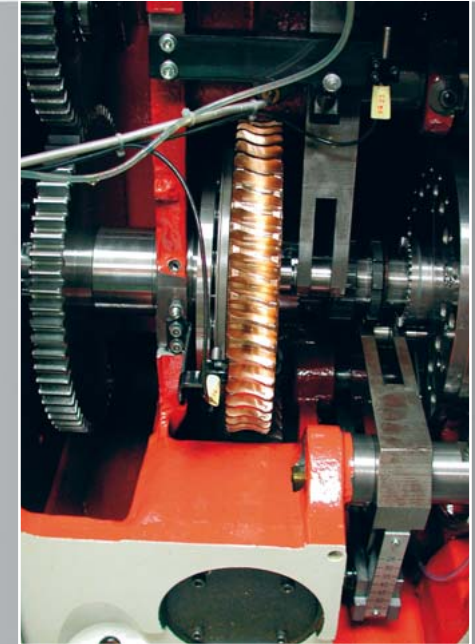
Machine spindles are adapted for various types of collets



■ Mechanism of bar stock feeding and clamping



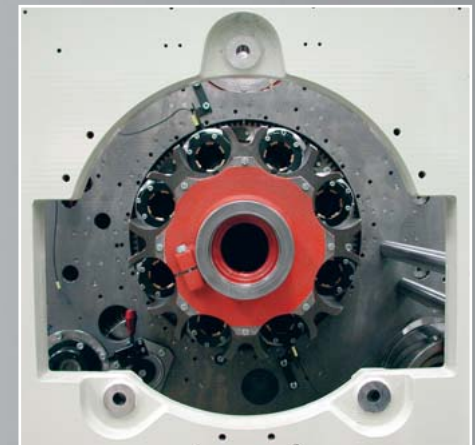
■ Drives of longitudinal slides – all four branches of the drives of slides are protected with independent overload release clutches



■ Drives of cross slides

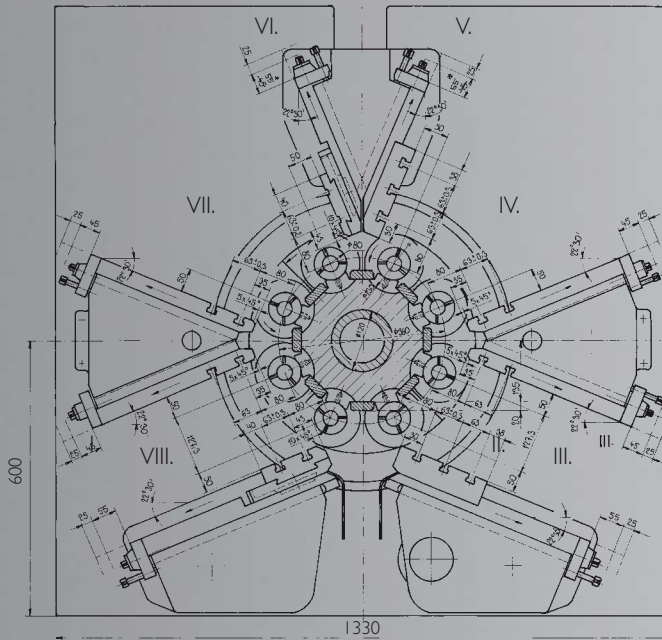


■ Block of longitudinal slides

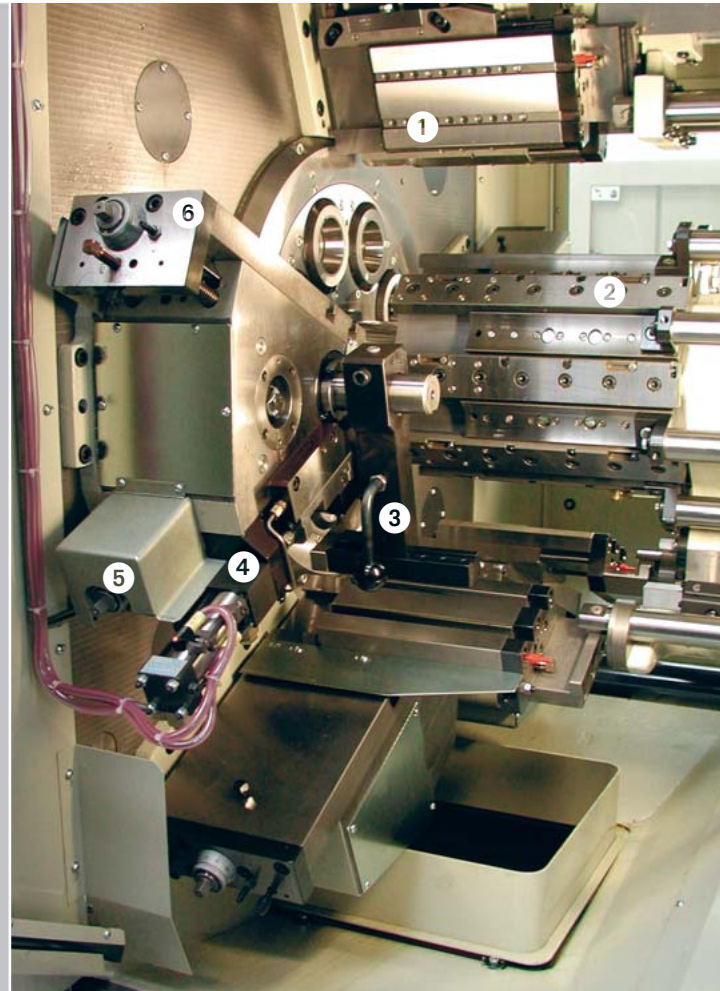


■ Machine enables mounting of various types of bar stock guides





■ Arrangement of 8 independent cross slides

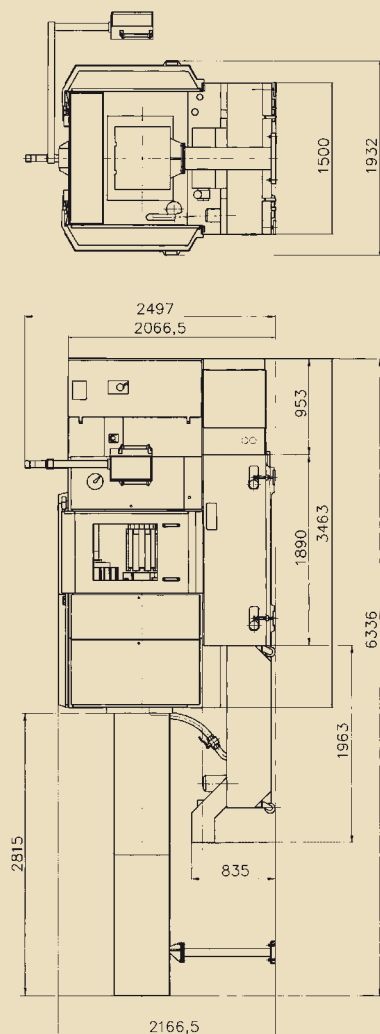


■ Working space

- ① Compound slides
- ② Longitudinal slides
- ③ Bar stock stop
- ④ Pick-up tool slide
- ⑤ Cut-off slide
- ⑥ Cross slides

### MACHINE STRONG POINTS

Each longitudinal, cross and compound slide is controlled by an independent cam providing the possibility of the stroke adjustment on the rocker arm of the corresponding drive  
 Precise arrestment of the spindle drum is ensured by a triad of rims with spur gearing  
 Machine is equipped with the standard bar stock guide and can be complemented with various types of the automatic bar loaders and automatic bar magazines  
 Machine can also be manufactured for other mains voltage than  $3 \times 400 \text{ V}, 50 \text{ Hz}$   
 Possibility of the bar feeding and clamping also in the 4<sup>th</sup> station  
 Mounting of the oriented stop of spindles controlled by the cam or NC controlled  
 Machine paint according to the customer's demand  
 Machine setting-up for a particular component according to the customer's demand  
 Mounting of the bar stop in the 4<sup>th</sup> station  
 Various types of swarf conveyors



### STANDARD EQUIPMENT

- Spindle drum locking by a triad of rims with spur gearing
- SIMODRIVE SIEMENS variable speed motors
- PLC – SIEMENS SIMATIC programmable logic controller; S 7.300 model
- 8 frontal slides and 8 cross slides
- 4 compound slides in the 1<sup>st</sup>, 2<sup>nd</sup>, 5<sup>th</sup> and 6<sup>th</sup> stations
- Standard bar stock guide
- Feeding, clamping and bar stop in the 8<sup>th</sup> station
- 4 safety clutches preventing from the slides overloading

### MACHINE VERSION

- MORI-SAY 832 – for machining of bars up to 32 mm dia
- MORI-SAY 842 – for machining of bars up to 42 mm dia
- MORI-SAY 832S – provided with stopping of spindles
- MORI-SAY 842S – provided with stopping of spindles

### OPTIONAL EQUIPMENT

- Bar stock feeding and clamping in the 4<sup>th</sup> station
- Bar stop in the 4<sup>th</sup> station
- Device for the general stopping of spindles – 832SAC and 842SAC versions
- Hydraulic oriented stopping of spindles – 832SAC and 842SAC versions
- NC oriented stopping of spindles – 832SAC and 842SAC versions
- Pick-up spindle with hydraulically controlled collet clamping
- Brake of the pick-up spindle
- NC drive of the pick-up spindle
- Hydraulically controlled tool slide for the cut-off side machining in the 8<sup>th</sup> and 4<sup>th</sup> stations
- Tool holders
- Tapping and thread chasing attachments
- Reaming attachment
- High-speed drilling attachment
- Push-broaching attachment
- Drilling heads on frontal slides – two-spindle head, three-spindle head, four-spindle head
- Extra-axial drilling, fixed
- Extra-axial drilling, synchronous
- Cross drilling
- Drilling, milling and threading units
- Radial thread rolling
- Workpiece marking
- Thread milling and polygon machining at rotation
- Thread chasing
- NC compound slides for the 1<sup>st</sup>, 2<sup>nd</sup>, 5<sup>th</sup> and 6<sup>th</sup> stations
- Preparation for the automatic bar magazine
- Preparation for the oil mist exhaustion
- Selection of the equipment for the swarfs carrying out and coolant in an independent sedimentation tank
- High-pressure coolant and tool wash-out
- Setting-up for a part machining and the machine acceptance in the TAJMAC-ZPS plant

	832AC	832SAC	842AC	842SAC	
<b>Number of spindles</b>	<b>8</b>				
Inner dia of clamping tube	∅ mm	43	43	53	53
<b>Bar stock dimension</b>					
Round cross section	∅ mm	32	32	42	42
Hexagonal cross section	mm	27	27	36	36
Square cross section	mm	22	22	29	29
Pitch diameter of spindles	mm				360
Max. length of bar feeding	mm				125
<b>Working cycle</b>					
Range of working times	sec.	1.4-90	1.4-90	1.4-90	1.4-90
Idle time	sec.	1	1	1-1,3	1-1,3
Speed range of spindles	rpm	270-3 750	270-3 200	270-3 200	270-3 200
General stopping of spindles		no	yes	no	yes
<b>Frontal slides (independent) – number</b>					
		8	8	8	8
Range of working strokes	mm	0-110	0-110	0-110	0-110
<b>Central block of longitudinal slides</b>					
Stroke	mm	40-90	40-90	40-90	40-90
Adjustability	mm	200	200	200	200
<b>Cross slides – number</b>					
		8	8	8	8
Adjustability	mm	25	25	25	25
Range of working strokes in the 1, 2, 5, 6 st.	mm	0-50	0-50	0-50	0-50
Range of working strokes in the 3, 4, 7, 8 st.	mm	0-41	0-41	0-41	0-41
Cross slides (possibility) 1, 2, 4, 5 stations		yes	yes	yes	yes
<b>Drives</b>	SIEMENS				
Main motor	kW	37	37	37	37
Feed motor (for working times)	kW	9.4	9.4	9.4	9.4
Machine operational input	KW/kVA	51/61	51/62	51/62	51/62
PLC Programmable logic controller	SIEMENS, SIMATIC S 7-300				
Electrical equipment	400 V, 50 Hz				
<b>Machine dimensions</b>					
Machine total length					
– with bar stock guide	mm				6 336
– without bar stock guide	mm				3 463
Machine total width	mm				1 932
Machine total height	mm				2 497
Machine weight	kg				11 320

Description, illustrations and numerical data may not always correspond with the machine latest version.

<b>MANUFACTURER</b> <b>TAJMAC-ZPS, a. s.</b> Trída 3. května 1180 764 87 Zlín, Malenovice CZECH REPUBLIC Tel.: +420 577 532 072 Fax: +420 577 533 626 www.tajmac-zps.cz e-mail: info@tajmac-zps.cz	<b>HOLDING</b> <b>TAJMAC-MTM, S. p. a.</b> Via Gran Sasso 15 20092 Cinisello Balsamo ITALY Tel.: + 39 02 66017878 Fax: + 39 02 66011457 www.tajmac-mtm.it e-mail: info@tajmac-mtm.it
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