SIX-SPINDLE AUTOMATIC LATHE

MORI-SAY 620AC

TAJMAC – ZPS

- 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
- Range of diameters from 3 mm to 20 mm
- Machine version with oriented stopping of spindles
- Minimum values of working and idle times

SIX-SPINDLE AUTOMATIC LATHE

MORI-SAY 620AC

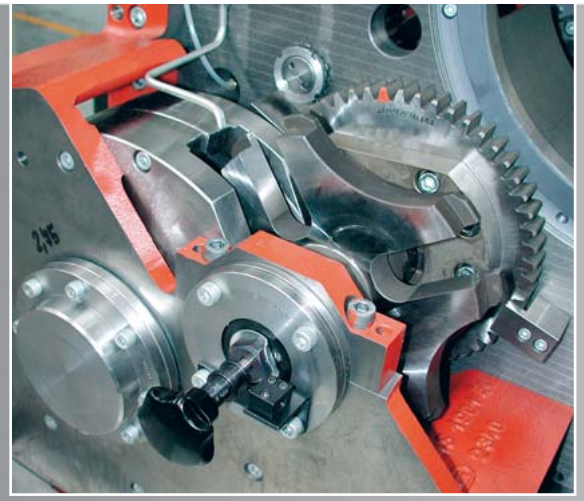
Traditional cam automatic lathe of the high accuracy, rigidity and quickness. It is intended for the mass and series production of precise components from the bar stock.

CONSTRUCTION

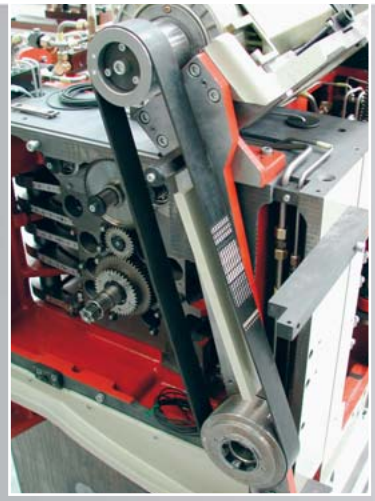
Conception characteristics is the high accuracy and rigidity at machining
6 spindles
6 independent frontal slides
6 cross slides
4 compound slides in the 1st, 2nd, 4th and 5th stations
Variable speed motors for machine speeds and feeds
Hardened slide-ways of all slides
Arrestment of the spindle drum by a triad of rims with spur gearing
Display for programming and diagnostics of machine functions
Absolute angular sensing device with programmable outputs
Bar stock guide
Work space lighting by fluorescent lamps
Automatic two-circuit central lubrication
Efficient device for swarf removal
Quick-change disk cams for movements of frontal, cross and compound slides
4 safety clutches preventing from the slides overloading

■ Machine heart – spindle drum and central block of frontal slides

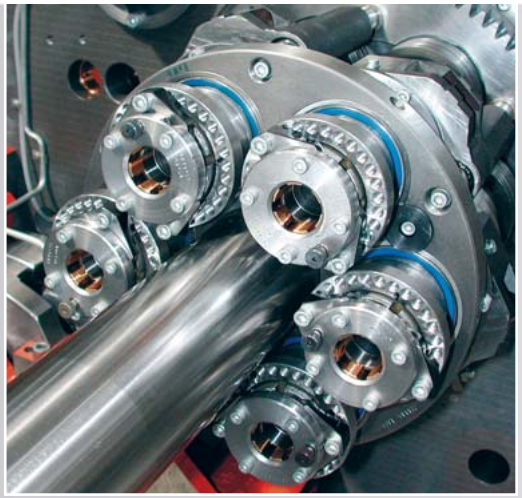
■ Quick-change operational cam



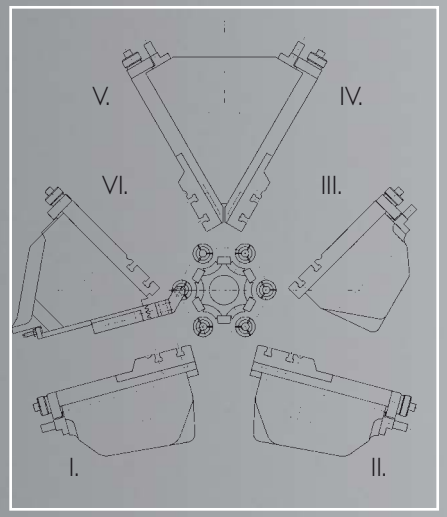
- Geneva mechanism of spindle drum indexing. By the cam alterable length of arm ensures the high dynamics of indexing.



- Tipping drive of working spindles enables an easy access to the interchangeable gear wheels of attachments and to the rocker arms of longitudinal and compound slides



- Back side of spindle drum with work spindles



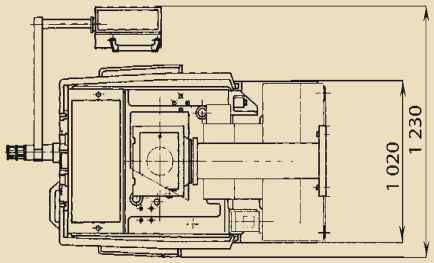
- Arrangement of 6 independent cross slides

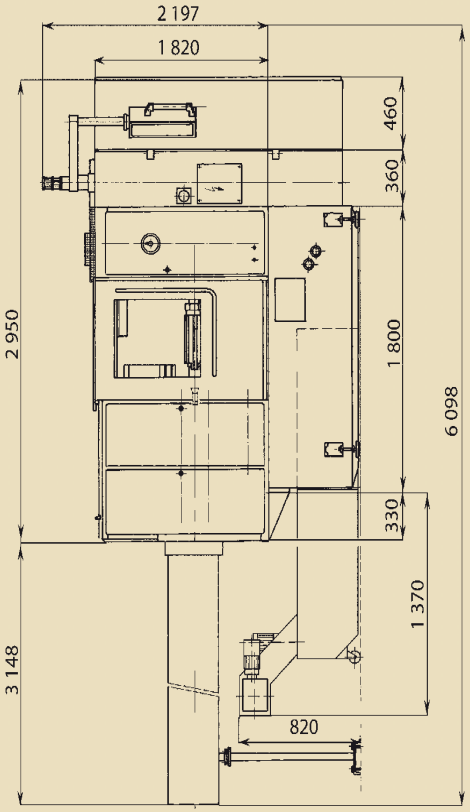
ADVANTAGES

Each frontal, cross and compound slide is controlled by an independent disk cam providing the possibility of the stroke adjustment on the rocker arm of the coresponding drive
Precise arrestment of the spindle drum is ensured by a triad of rims with spur gearing
Mechanical control of the spindle drum arrestment
Possibility of the use of different types of automatic loaders and automatic magazines
Other mains voltage than 3 × 400 V/50 Hz
Possibility of the bar feeding and clamping in the 3rd station
Mounting of the bar stop in the 3rd station
Mounting of the oriented stop of spindles
Machine paint according to the customer's demand
Machine setting-up for a particular component of the customer
Various types of swarf conveyors
Possibility of the connection to an individual exhausting device or central exhausting system
Cams for cross and frontal slides are interchangeable

TECHNICAL DATA

MORI-SAY 620AC





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
- 6 cross slides and 6 frontal slides
- 4 compound slides in the 1st, 2nd, 4th and 5th stations
- Standard bar stock guide
- Feeding, clamping and bar stop in the 6th station
- 4 safety clutches preventing from the slides overloading
- Independent drive of the central block

MACHINE VERSIONS

- MORI-SAY 620AC
- MORI-SAY 620SAC – machines with stop of spindles

OPTIONAL EQUIPMENT

- Feeding, clamping and bar stop in the 3rd station
- Device for the general stop of spindles – 620SAC version
- Hydraulic oriented stop of spindles – 620SAC version
- NC oriented stop of spindles – 620SAC version
- Pick-up spindle with hydraulicically controlled collet clamping
- Brake of the pick-up spindle
- Pick-up tool slide with a mechanical drive
- Tool holders
- Tapping and thread chasing attachments
- Thread rolling with two roller dies
- Attachment for outer polygon machining and thread milling
- Attachment for internal polygon machining
- Cams for frontal, cross and compound slides
- Necking-down attachment
- High-speed drilling attachment
- Rotary reaming attachment
- NC compound slides for the 4th and 5th stations
- Preparation for the automatic bar magazine
- Preparation for the oil mist exhaustion
- Selection of the equipment for 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

		620AC	620SAC
Number of spindles		6	
Inner dia of clamping tube	⌀ mm	28	28
Bar stock dimension			
Round cross section	⌀ mm	20	20
Hexagonal cross section	mm	17	17
Square cross section	mm	14	14
Pitch diameter of spindles	mm	180	
Max. length of bar feeding	mm	100	
Frontal slides – number		6	6
Range of working strokes I., II., IV. and V.	mm	68	68
Range of working strokes III., and VI. stations	mm	90	90
Cross slides – number		6	6
Adjustability	mm	13	13
Range of working strokes	mm	0 – 36	0 – 36
Compound slides – number		4	4
Range of working strokes I., II.	mm	0 – 51	0 – 51
Range of working strokes IV., V.	mm	0 – 55	0 – 55
Working cycle			
Working time	sec.	0.8 – 90	0.8 – 90
Idle time	sec.	0.5 – 0.8	0.5 – 0.8
Speed range of spindles	1/min	500 – 6 500	500 – 4 500
General stopping of spindles		no	yes
Motors			
Main motor	kW	9	9
Feed motor (for working times)	kW	7.5	7.5
Machine operational input	KW/kVA	19/21	19/21
Machine dimensions			
Machine total length			
– with bar stock guide	mm	6 098	
– without bar stock guide	mm	3 000	
Width	mm	1 230	
Height	mm	2 197	
Machine weight including standard equipment	kg	5 000	

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

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