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The LSA 8-200 is equipped with a Fanuc 300i-Model A / USA featuring an Integrated Ladder III PLC control.The control allows communication via internal network and the internet, with remote service by our technicians to assist and evaluate to resolve any issues.





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LSA 8-200 Multi-Way Production Cell for 3-Sided Machining In One Clamping

The LSA design is a multi-way production cell with horizontal turret axis can be used to complement other rotary transfer automatic systems.

The machine application is based on the clamping position of the workpiece, flexibility required for the machine, access for setting up and the number of radial units.

The LSA 8-200 model has seven machining stations that feature 2-jaw chucks or custom fixtures for cast blanks. It also has one dedicated loading station and one station for gauging, inverting, or other special processes. It features four to six stations with six, eight or a maximum of ten horizontal units and two or three radial units. These can swivel and be adjusted, and thus are able to adapt to changing workpiece shapes.

The machine base exhibits high static and dynamic rigidity and allows excellent access to the workspace, as well as for the removal of chips.

The indexing unit is cycled between the machining stations with extreme accuracy and repeatability during the rotary transfer process. It can be customized to accept an infinate number of workpiece clamping fixtures. It is also possible for two fixtures to be located next to each other. In this set-up, machining of

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two workpieces can be completed in one cycle, or one workpiece can be in the first or second clamping (multisided machining; A/B load).

Clamping of the workpiece is usually hydraulic, e.g. self-centering clamping in two or three jaw chucks, clamping fixtures, collet chucks, swivel-mounted clamping jaws or clamping arbors.

For the LSA three spindle sleeve sizes are available. There are hydraulic or mechanical machining units in various sizes that enable light or heavy material removal, and also the use of multi-spindle heads.

For precise and reliable long-term usage, our hydraulic linear drives (HLD) are also provided as an option. With their user-friendly high performance technology, they are an optimum drive solution.

For increased production safety additional equipment can be introduced such as tool breakage or wear controls, tool life monitors, workpiece measurements, defect diagnostics systems, and more.

Special equipment, such as the automatic feed of assembly parts, loading and unloading by means of robots, or complete interlinked systems, make the LSA a high productivity machine.

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8-200



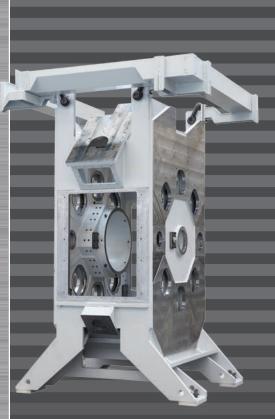


The 3-axis modules feature 20m/mm single lead ball screw assemblies, with the Z-Axis having a 180mm stroke while the X-Axis and Z-Axis both featuring a 60mm stroke each.

The feed rate is 0 to 20,000 mm/ min with a rapid feed rate of 20,000 mm/min. The LSA modules feature size 35 preloaded linear monorail guides.

This powerful system yields a maximum feed force of 7000N, yet holds an impressive position accuracy of TP 0.007mm.

LSA 8-200 Station 1.2 Load and Unload Station **Unit Layout** Station 2.3 PEMT 80/180 Thru Spindle Coolant Spindle Motor - 13.5 kW 1,150 RPM Station 2.1 PEMT 80/180 Thru Spindle Coolant Spindle Motor - 13.5 kW 1,150 RPM Station 2.2 PEMT 60/180 Thru Spindle Coolant Spindle Motor - 8 kW 1,750 RPM Station 3.1 PEMT 80/180 Station 3.3 PEMT 80/180 Thru Spindle Coolant Spindle Motor - 8 kW 1,750 RPM Thru Spindle Coolant Spindle Motor - 13.5 kW 1,150 RPM Station 4.1 PEMT 80/180 Thru Spindle Coolant Spindle Motor - 13.5 kW 1,150 RPM Station 4.2 PEMT 60/180 Thru Spindle Coolant Spindle Motor - 8 kW 1,750 RPM Station 4.3 PEMT 80/180 Thru Spindle Coolant Spindle Motor ~ 8 kW 1,750 RPM Station 5.1 OPEN Station 5.3 OPEN Station 6.2 PEMT 60/180 Thru Spindle Coolant Spindle Motor - 8 kW 1,750 RPM Station 6.3 PEMT 80/180 Thru Spindle Coolant Spindle Motor - 8 kW 1,750 RPM Cross Slide - 60mm x 60mm Station 6.1 PEMT 80/180 X Thru Spindle Coolant Soindle Motor - 8 kW 1.750 RPM Cross Slide - 60mm x 6 Cross Slide - 120 Station 7.3 OPEN Station 7.1 Station 7.2 OPEN Station 8.1 PEMT 60/180 Thru Spindle Coolant Spindle Motor - 8 kW 1,750 RPM Cross Slide - 60mm x 60mm Station 8.3 Station 8.2 PEMT 60/180 > X PEMT 60/180 Thru Spindle Coolant Spindle Motor - 8 kW 1,750 RPM Cross Silde - 120mm x 60mm



The unique design of the LSA 8-200 is anchored by a robust frame weldment that is precision machined by the finest German craftsmen. It incorporates engineering and design excellence with the finest materials and components used in its creation. The results: a machining center of robust construction and exceptional accuracy.

The work envelope is a large 150mm x 100mm x 125mm. Part loading can be Flexible Manual or Robotic at the one dedicated loading station. One station is dedicated for gauging and special devices, and there are seven cutting stations featuring self centering two-jaw chucks, or the use of custom designed fixtures for complex castings.



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LSA 8-200 Specifications

| Appointed Machine Space Requirement 3 mil Parta Loading | | | | | | |
|--|---------------------------------------|--|--|----------------------------|---------------------------------------|--|
| Approximate Machine Space Requirement Electrical Concretion Requirement Electrical Concretion Requirement Electrical Concretion Requirement A wire Y balanced Space 480 von 00/42 US mon 10/2 mark These are Refer Tool Space Requirement A wire Y balanced Space 480 von 00/42 US mon 10/2 mark These are Refer Tool Space Requirement A wire Y balanced Space A80 von 00/42 US mon 10/2 mark These are Refer Tool Space Requirement A wire Y balanced Space A80 von 00/42 US mon 10/2 mark These are Refer Tool Space Requirement A wire Y balanced Space A80 von 00/42 Tool Space Requirement A wire Y balanced Space A80 von 00/42 Tool Space Requirement A wire Y balanced Space A80 von 00/42 Tool Space A80 Tool Tool Space A80 von 00/42 Tool Space A80 Tool Tool | | | | | | |
| Executed Concentor Requirement 4 web Y balanced Stypes. 400 4001 Um 1220 Maching Workshore 7 balance With 2 year churds or churds or 0 (0) Um 1220 Maximum Northesing Some Michael With 2 year churds or churds or 0 (0) Um 1220 Some Michael With 2 year churds or churds or 0 (0) Um 1220 Some Michael With 2 year churds or 0 (0) Um 1220 Some Michael With | Complete Approximate Machine Weight | | 25 Metric Tons | Loading Station | | 1 Station for gauging and special devices. |
| Maching Work Emetge Maching Work Emetge 1 5 Station Index 3 Station Ind | Approximate Machine Space Requirement | | 33m ² | Parts Loading | | Flexible Manual or Automatic |
| Maching Work Envelopie Maching Model and Server and Elever Server Serve | Electrical Connection Requirement | | 4 wire Y balanced 3 phase 480 volt 60HZ | Machining Stations 7 | | 7 Stations with 2-jaw chucks or custom fixture |
| Maimum Installed Machining Modules 14 Horizontal Machining Units 5 Statu Modules See 60 Adapter 5 Statu Modules See 60 Adapt | | | | | | 6 bar (90psi) @ peek 3400 l/min (120 CFM) |
| Check Indicar Statis Indica Tot Adapter 3-Asis Mealing: Bell Volcimet Indexing Device Ridged indexer, diven by AC Express 3-Asis Mealing: Statis Mealing: Statis Mealing: Statis Mealing: Ridged indexer, diven by AC Express X- Asis: Ball Screw Manufacture: standard Tantef Oreice: Ridged indexer, diven by AC Express X- Asis: Ball Screw Manufacture: standard Conversion Conversion X- Asis: Ball Screw Manufacture: standard Conversion Conversion X- Asis: Ball Screw Manufacture: Statis Mealing: Conversion Conversion Statis Mealing: Statis Mealing: Conversion Conversion Conversion Statis Mealing: Statis Mealing: Statis Mealing: Conversion Conversion Statis Mealing: Statis Mealing: Statis Mealing: Conversion Converstatis Mealing: | | | | Tool Spindle Drive Options | | 6,300 RPM / 12.0 Kw (spindle size 80) |
| Axis Mode, Specifications Indexing Device Ritiged indexe, others by AC targue methods in the second with 50 kg Patter weight of the second weight of t | | | | | | |
| Heating: Stell Wildment Participation Transfer Device: Design Type: Ridge Indexer, diven by AC Expanse ROD, measuing system for position cc. Indexing Time Transfer Device: Design Type: Ridge Indexer, diven by AC Expanse ROD, measuing system for position cc. Indexing Time Transfer Device: Design Type: Ridge Indexer, diven by AC Expanse ROD, measuing system for position cc. Indexing Time Ridge Indexer, diven by AC Expanse ROD, measuing system for position cc. Indexing Time Ridge Indexer, diven by AC Expanse ROD, measuing system for position cc. Indexing Time Ridge Indexer, diven by AC Expanse ROD, measuing system for position conserved Ejecthon Fight Fight Fight AC Expanse Fight System Ridge Indexer, diven by AC Expanse ROD, measuing system for position conserved Ejecthon Fight Fight Fight AC Expanse Fight System Ridge Indexer, diven by AC Expanse ROD, measure system Y Axis: Bill Screw Manufacturer: Acts field Y: 20 A Expanse Fight System Coolant System Conserved Ejecthon Fight Field AC Expanse ROD (Fight Field AC Expanse Fight System) Conserved Ejecthon Fight Field AC Expanse ROD (Fight Field AC Expanse ROD (Fight Field AC Expanse Fight System) Conserved Ejecthon Fight Field AC Expanse Fight System ROD (Fight Field AC Expanse Fight System) Rod (Fight Field AC Expanse Fight System) Rod (Fight Field AC Expanse Fight System ROD (Fight Field AC Expanse Fight System) Rod (Fight Fight Fight System) Rod (Fight Fight System) Rod (Fight Fig | | | | desegnation de so | | |
| Aits: Aits: <th< td=""><td>3-Axis Module, Spec</td><td>ifications</td><td></td><td>Indexing Device</td><td></td><td></td></th<> | 3-Axis Module, Spec | ifications | | Indexing Device | | |
| 2 - Asi:: Ball Scew Munifacture: attradad Index 2 - Asi:: Ball Scew Munifacture: 180 mm Image: Stoke 180 mm A Kai:: Ball Scew Munifacture: attradad Coolanti System Coolanti System 7 - Aki:: Ball Scew Munifacture: attradad Coolanti System Coolanti System 7 - Aki:: Ball Scew Munifacture: attradad Munifacture: Coolanti System 7 - Aki: Ball Scew Munifacture: attradad Munifacture: Coolanti System One (1) Hinghand Conveyor 7 - Aki: Ball Scew Munifacture: attradad Coolanti System One (1) Tubolifier, System One (1) Tubolifier, System, One (1) Stoke One (1) Tubolifier, System, One (1) 2000 Iters/min at 2.4 bar Specifications Filter Transfer Pump One (1) 2000 Iters/min at 2.4 bar Filter Transfer Pump One (1) 2000 Iters/min at 2.7 bar Motor Spindle Options // Linear Guots Figure: Attra Synthetore: Attra Synthetore: One (1) 2000 Iter/min at 2.7 bar Spindle Options // Linear Guots Figure: Values frankore: Filter Transfer Pump One (1) 2000 Iter/min at 1.3 bar Spindle Options // Line | Housing: | Steel Weldment | | Transfer Device: | Design Type: | Ridged indexer, driven by AC torque motor and BOD measuring system for position control |
| Advis feed Z: 20 mmin single lead ball screw assembly Image: Convertion of the convert | Z - Axis: | Ball Screw Manufacturer: | standard | | Indexing Time | |
| Stoke 180 mm Colaids System Colaids System A Ait: Bid Store Manufacture: andred views Ornel Manufacture: Advised Views Ornel Manufacture: Orne | | Axis feed Z: | 20 m/min single lead ball screw assembly | | | |
| K Aki: Bel Serve Mandacturer: Serve Ser | | Lange web percentage of the second | | Coolant System | 127 | 1 |
| Adds. Feed X: 20 m/min single lead ball screw assembly Conveyors One (1) Highpitand Conveyor: Y- Axis: Ball Screw Manufacturer: dandard Adds. feed Y: Approximately 4500 Liters Stroke 00 mm Conveyors One (1) Paperham Filter, 80 m, 7000 min Stroke 00 mm minin Paperian One (1) Turboffler, 35 µm, 200 minin Specifications: Rapic Feed Fale: 20.000 mm/min Paperian Specifications: Rapic Feed Fale: 20.000 mm/min Paperian Max Feed Fale: 20.000 mm/min Paperian One (1) Turboffler, 35 µm, 200 minin No. Drive: AC Acis Molor Paperian Paperian No. Drive: AC Acis Molor Paperian Paperian Hair Goalds Rail Manufacturer: Narufacharer Hidehnhain Linear Goalds Cali Manufacturer: Narufacharer Hidehnhain Linear Goalds Rail Manufacturer: Manufacturer: Narufacharer Hidehnhain Dire Nimin at 1.0 bar Hair Goalds Rail Manufacturer: Narufacharer Hidehnhain Dire Nimin at 2.7 bar Paperian Dire Specifications Feed Fale: Manufacturer: Manufacturer: Manufacturer: Spindle Option #1 Manufacturer: Narufacturer: Manufacturer: Manufacturer: Spindle Doption #2 Manuf | Y. Avie | 17171717177 | | | Manufacturer | Knoll Maschinenbau GmbH |
| Stroke 00 mm Akis: Bil Strew Manufacturer: tandard Akis: Bil Strew Manufacturer: tandard Akis: Bil Strew Manufacturer: tandard Stroke 00 mm miningle ised bil screw assembly Stroke 00 mm/min 0 to 20.000 mm/min Agaid Feed Fate: 20.000 mm/min 0 to 20.000 mm/min Mac. Feed Force: 7000h 0 to 20.000 mm/min Unser Glass Scales: Manufacturer: 1100 mm/min at 2 bar Unser Glass Scales: Manufacturer: Manufacturer 10 to 20 mm/min at 3 bar Unser Glass Scales: Manufacturer: Witrig & Frank 0 ne (1 300 litr/min at 2 bar To creater type and size: HSk-G83 miningle ised bar 10 mm/min 1 bar Spindle Option #2 Manufacturer: Manufacturer: Fanu | Y- Axis: Common Axis | And we have been as the second s | | ooonan oystem. | | |
| Y- Aris: Ball Screw Manufacturer: standard Axis fed Y 20 mmin arige lead ball screw assembly Strike Approximately 4300 Lites Strike 60 mm 60 mm Control Lites Approximately 4300 Lites Specifications: Rapic Fed Rate: 20.000 mm/min Immersion Chiler ABWC Coning Capacity Specifications: Rapic Fed Rate: 20.000 mm/min Colart Volume One (1) Turboffler, 35 µm, 200 l/min More: Rapic Fed Rate: 20.000 mm/min Colart Volume One (1) 200 liter/min at 2.4 bar More: AC Asis Motor Colart Manufacture: Filer Transfer Pump One (1) 200 liter/min at 2.7 bar Inser Gias Scale: Manufacture: INA/ Soch Revorth Liter Scale Scale: Manufacture: No Inser Gias Scale: Manufacture: INA/ Soch Revorth Electrical Equipment Low Pressure Pump One (1) 200 liter/min at 1.0 bar Uiters Gias Scale: Manufacture: INA/ Soch Revorth Electrical Equipment Low Pressure: High Pr | | | | - | | |
| Axis feed Y: 20 mmin single fead ball screw assembly Volume Filtration System One (1) Pagefand Filtre, 80 µm, 500 //min Cammon Aris Specifications: Feed Fate: 0 to 20.000 mm/min One (1) Tubuffiltre, 30 µm, 500 //min Specifications: Feed Force: 700/M One (1) Tubuffiltre, 30 µm, 500 //min Volume Filtration System One (1) Pagefand Filtre, 80 µm, 500 //min One (1) Pagefand Filtre, 80 µm, 500 //min Motor Manufacture: 700 //min The Aria Manufacture: One (1) Pagefand Filtre, 80 µm, 500 //min Motor Assaudcature: 140 // Aria Manufacture: The Aria Manufacture: The Aria Manufacture: One (1) 200 iter/min at 12 har Motor Spindle Options F Manufacture: Manufacture: Tool receiver type and size: Manufacture: Manufacture: Manufacture: Manufacture: 400-480 V Three Phase 60 Hz Tool receiver type and size: Manufacture: Witzig & Frank Voltage: Advise (0) One (1) 200 iter/min at 10 har Spindle Colind: Manufacture: Manufacture: Manufacture: Advise (0) Advise (0) Tool receiver type and size: Manufacture: Manufacture: Frank Cont | | | | | | |
| Stroke Born Stroke 60 mm/min Specification: Rapid Feed Rate: 20.000 mm/min Specification: Rapid Feed Rate: 20.000 mm/min Max: Feed Force: 7000N Coolant Pumps: MociOne: AD Adds Motor Filter Backflush pump Gee Abar MociOne: AD Adds Motor Filter Backflush pump Gee Abar Inser Guide Ratin Manufacture: Manufacture: Manufacture: One (1) Stolling:min at 2.2 bar Mocion Manufacture: Manufacture: Manufacture: One (1) Stolling:min at 2.2 bar Motor Spindle Option: Specifications: Manufacture: One (1) Stolling:min at 2.2 bar Motor Spindle Option: Specifications: Manufacture: One (1) Stolling:min at 2.2 bar Motor Spindle Option: Specifications: Manufacture: One (1) Stolling:min at 2.2 bar Motor Spindle Option: Specifications: Manufacture: Manufacture: Tool camp? Head Stale: MAnufacture: Manufacture: Manufacture: Spindle Option #2 Spindle Option #2 Manufacture: Finuuo | | | | | | |
| Common Xis Read Feat: O to 20.000 mm/min Immersion Chiller 48W Cooling Capacity Specification: Map / Fead Fact: 20.000 mm/min Or | | | | | | |
| Specification: Rajic feed Rate: 20,000 mm/min Colant Pumps: Filter Transfer Pump One (1) 200 terr,/min # 2.4 bar No:-Drive: AC Add Motor Filter Additub pump One (1) 200 terr,/min # 2.4 bar Postion Accuracy: Filter Additub pump One (1) 200 terr,/min # 2.4 bar Liner Giade Rall Manufacturer: Filter Additub pump One (1) 200 terr,/min # 2.7 bar Uitrer Gide Rall Manufacturer: No/- Book: Record: Filter Additub pump One (1) 200 terr,/min # 2.7 bar Uitrer Gide Rall Manufacturer: No/- Book: Record: One (1) 200 terr,/min # 1.0 bar One (1) 200 terr,/min # 1.0 bar Uitrer Gide Rall Manufacturer: No/- Book: Record: Nore Spindle Options Dee (1) Boo terr,/min # 4.0 bar Maturacturer: Nore Spindle Options Spindle Options Spindle Options Spindle Options Year Tool receiver type and size: HSK-C63 Manufacturer: Manufacturer: Faruk Spindle Option #2 Spindle Cooling n.a. Spindle Options Spindle Options Spindle Options Pare Impace Spindle Option #2 Spindle Cooling n.a. One receiver type and size: HSK-C63 Manufacturer: Manufacturer: Farue Spindle Option #2 Manufacturer: Diameter 80 mm Manufacturer: Farue Co | | A STATE OF A | | - | | |
| Max. Feed Force: 7000N Coolant Pump: Filter Transfer Pump One (1) 200lter/min at 2.4 bar NO-Drive AC Avis Modor Poilton Accuracy: TP 00007 mn Poilton Accuracy: TP 00007 mn Motor Manufacturer: Fanue or Siemans Poilton Accuracy: The opinities of tass Sociality One (1) 200 liter/min at 2.4 bar Motor Manufacturer: Fanue or Siemans Poilton Accuracy: The opinities of tass and task and t | | | | | interestor onliter | Torrest oppointing outpacity |
| NC-Drive: A Quest Motor Position Accuracy: TP 0.037mm Motor Manufacturer: Fanue or Siemens Lineer Giales Scales: Manufacturer: Heidenhain Lineer Giales Manufacturer: BAY Boson Rearch Bindle Options Specifications Electrical Equipment Spindle Options #1 Manufacturer: Motor Spindle Options Specifications Electrical Equipment Tool receiver type and size: HSK-603 Tool receiver type and size: Manufacturer: Spindle Option #1 Manufacturer: Spindle Cooling n.a. Spindle Cooling n.a. Spindle Dutor Manufacturer: Max FPV: n = 6.300 min-1 Max FPV: n | | | | Coolant Pumpe: | Filter Transfer Pump | One (1) 200liters/min at 2.4 har |
| Position Accuracy: IP 0.007mm Motor Manufacturer: Fanue or Siemens Linear Glass Scales: Manufacturer: ILinear Glass Scales: Manufacturer: Joint Spindle Options #1 Manufacturer: Spindle Option #2 Manufacturer: Manufacturer: Viltig & Frank Tool receiver type and size: HSK-C63 Tool receiver type and size: HSK-C63 Tool receiver type and size: Manufacturer: Spindle Cooling n.a. Spindle Cooling n.a. Spindle Cooling n.a. Spindle Detring ize: Dimeter 80 mm Max PAPK: n = 6.300 min.1 Max PAPK: n = 6.300 min.1 Max Power: P = 13.5 Kw Manufacturer: Witzig & Frank Vite Berner: Vite POMCIA or USB Tool creaver type and size: HSK-C50 | | | | Goorant Fumps. | | |
| Motor Manufacturer: Fanue or Siemens Weekend Circulation Pump One (1) 200 liter/min at 1.0 bar Linear Glass Scales: Manufacturer: INA / Bosch Rexroth High Pressure Pump One (1) 800 liter/min at 1.0 bar Motor Spindle Options Scales: INA / Bosch Rexroth Dirty Water Transfer Pump One (1) 800 liter/min at 1.0 bar Motor Spindle Options Scales: Manufacturer: Witzig & Frank Voltages: Maints Oltage: 460-480 V Three Phase 60 Hz Tool receiver type and size: HSK-063 Control: Manufacturer: Fanue Spindle Option #1 Manufacturer: Manufacturer: Fanue 24V (DC) Tool receiver type and size: Manufacturer: Manufacturer: Fanue Spindle Dotion #1 If the me grease Control: Manufacturer: Fanue Spindle Colain: To a e, 300 min-1 Max PAPA n = 0,300 min-1 Max PAPA Max PAPA n = 0,300 min-1 Max Pare Panel Pare Operating System: ChC Control with Windows XP-PRO Max PAPA n = 0,300 min-1 Max PAPA n = 0,300 min-1 Max PAPA < | | | | - | | TO DOTATA A Average of the state of the stat |
| Unser Glass Scales: Manufacturer: Hanufacturer: Ha | | | | | | |
| Linear Guide Rail Manufacturer: INA / Bosch Rexroth Dirty Water Transfer Pump One (1) 800 liter/min at 1.0 bar Motor Spindle Options Specifications Image: Specifica | | | | | | |
| Linear Guide Type: size 35 Preloaded Linear Monoral Guides Advances Motor Spindle Option #1 Manufacturer: Witzig & Frank Electrical Equipment Spindle Option #1 Manufacturer: Witzig & Frank Voltages: Mains Voltage: 24V (DC) Tool receiver type and size: Manual Tool receiver type and size: Manual Controls Voltage: 24V (DC) Spindle Coloint: 70 bar Spindle Coloint: 70 bar Spindle Coloint: France Spindle Coloing n.a. Spindle Color of the imperson France Type: 300i-Model A / USA Spindle Coloing n.a. Spindle Color of with Windows XP-PRO Control: Manual Type: 300i-Model A / USA Max Power: D = 6.300 min-1 Max Type: 300i-Model A / USA Deprading System: CNC Control with Windows XP-PRO Max Power: M = 175 Nm Matual Type: 200i-Model A / USA Data Exchange Witzig & Frank Data Exchange The control allows communication v Spindle Lobrio #2 Manual Tool receiver type and size: Manual | | | | | | |
| Motor Spindle Options Specifications Electrical Equipment Spindle Option #1 size 80 Manufacturer: Witzig & Frank Voltage: 460-480 V Three Phase 60 Hz Tool receiver type and size: HSK-C63 Input/Output Voltage: 24V (OC) Tool receiver type and size: Manual Input/Output Voltage: 24V (OC) Spindle Lubrication Iffe time grease Control: Manufacturer: Fanue Spindle Dotion #1 na. Spindle Dotion #1 Perind Size: Diameter 80 mm Max RPM: n = 6.300 min-1 Integrated Ladder III PLC Control Integrated Ladder III PLC Control Max Torque: Mt = 175 Nm Mt = 175 Nm Otor receiver type and size: HSK-C50 Tool receiver type and size: HSK-C50 The control allows communication v network and the internet. Spindle Lubrication Iffe time grease Integrate adder III PLC Control Integrate adder III PLC Control Tool receiver type and size: Manual Tool receiver type and size: HSK-C50 The control allows communication v Tool receiver type and size: Diameter 60 mm Diameter 60 mm Integrate <td></td> <td></td> <td></td> <td>Dirty water transfer Pump</td> <td>One (1) ooo mer/min at 1.0 bar</td> | | | | | Dirty water transfer Pump | One (1) ooo mer/min at 1.0 bar |
| Spindle Option #1 Manufacturer: Witzig & Frank Voltages: Mains Voltage: 460-480 V Three Phase 60 Hz Tool receiver type and size: Manual Input/Output Voltage: 24V (DC) Through Spindle Coolant: 70 bar Input/Output Voltage: 24V (DC) Spindle Coolant: 70 bar Controls Voltage: 24V (DC) Spindle Coolant: 70 bar Input/Output Voltage: 24V (DC) Spindle Coolant: 70 bar If time grease Manufacturer: Fanuc Spindle Cooling n.a. Spindle Cooling n.a. Spindle Dotion #2 Diameter 80 mm Operating size: Diameter 80 mm Max Power: P = 13.5 Kw Manufacturer: Control Panel Cooling (mit) // machine side Panel Vice Control Max Torque: Mt = 175 Nm Manufacturer: Mol keyboard. Tool receiver type and size: HSK-C50 Tool clamp / release: Manual Torol clamp / release: Manual Exchange Va PCMCIA or USB Spindle Lobrication If time grease English other languages available on responder control Spindle Lobrication If time grease English other languages available on responder control Spindle Lobrication If time grease English other languages available on responder control | | Linear Guide Type. | Size 35 Preloaded Linear Monorali Guides | | | |
| Spindle Option #1 size 80 Mainufacturer: Witzig & Frank Voltages: Mainus Voltage: 460-480 V Three Phase 60 Hz Tool receiver type and size: Manual Input/Output Voltage: 24V (DC) Toroigh Spindle Coolant: 70 bar Controls Voltage: 24V (DC) Spindle Coolant: 70 bar Uighting Voltage: 24V (DC) Spindle Coolant: 70 bar Controls Manufacturer: Fanuc Spindle Cooling n.a. Spindle Lubrication If etime grease Controls Manufacturer: Fanuc Spindle Dotion #2 Diameter 80 mm Diameter 80 mm Operating System: CNC Control with Windows XP-PRO Max Power: P = 13.5 Kw Manufacturer: Tool receiver type and size: Mit = 175 Nm Spindle Option #2 Manufacturer: Witzig & Frank Data Exchange Va PCMCIA or USB Tool receiver type and size: HSK-C50 Tool receiver type and size: Manual Tool clamp / release: Manual English other languages available on response Spindle Lubrication If etime grease English other languages available on response Spindle Lubrication If etime grease English other languages available on response Spindle baaring size: Diameter 60 mm Optional Equipment | Mater Spindle Option | a Casailiantiana | | Electrical Equipme | | |
| size 80 Tool receiver type and size: HSK-C63 Controls Voltage: 24V (DC) Tool clamp / release: Manual Input/Output Voltage: 24V (DC) Through Spindle Coolant: 70 bar Lighting Voltage: 24V (DC) Spindle Lobrication life time grease Control: Manufacturer: Fanue Spindle Cooling n.a. Spindle Lobrication Type: 300i-Model A / USA Spindle Cooling n.a. Spindle Cooling Spindle Loadfer II PLC Control Max RPM: n = 6,300 min-1 Max Max Max Torque: Mt = 175 Nm Operating System: CNC Control with Windows XP-PRO Spindle Loption #2 Manufacturer: Witzig & Frank Data Exchange Via PerMolia A / USA Tool receiver type and size: HSK-C50 Through Spindle Coolant: Tob bar Through Spindle Coolant: Tob bar Spindle Lobrication fife time grease Manual Integrated Ladfer II PLC Control Indiverse and | | | Within & Eroph | | | 460, 490 V Three Dhase 60 Hz |
| Tool clamp / release: Manual Through Spindle Coolart: 70 bar Spindle Lubrication life time grease Spindle Cooling n.a. Spindle Cooling n.a. Spindle Spindle Cooling n.a. Spindle Spindle Cooling n.a. Spindle Cooling n.a. Spindle Spindle Cooling n.a. Spindle Spindle Cooling n.a. Max Torque: Mt = 175 Nm Spindle Cooling Nanufacturer: Witzig & Frank Tool receiver type and size: Tool receiver type and size: Manual Through Spindle Cooling n.a. Spindle Cooling n.a. Spindle Cooling n.a. Spindle Cooling Naual Through Spindle Coolart: 70 bar Spindle Lowication Iffe time grease Spindle Lowication Iffe time grease Spindle Cooling n.a. Spindle Lowication Iffe time grease | | Indituraciurei. | WILZIG & FLANK | vonages. | mains voitage. | 400-460 V Three Phase ou Hz |
| Through Spindle Coolant: 70 bar Lighting Voitage: 24V (DC) Spindle Lubrication life time grease Manufacturer: Fanue Spindle Cooling n.a. Type: 300i-Model A / USA Spindle bearing size: Diameter 80 mm Operating System: CNC Control with Windows XP-PRO Max Power: P = 13.5 Kw Operating System: CNC Control with Windows XP-PRO Max Power: P = 13.5 Kw Operating System: CNC Control with Windows XP-PRO Max Torque: Mt = 175 Nm Control Panel Quantity Two (2) panels (one (1)/ machine side Spindle Option #2 Manufacturer: Witzig & Frank Data Exchange Via PCMCIA or USB Tool receiver type and size: MSK-C50 The control allows communication v network and the internet. Language Spindle Lubrication life time grease Iffee time grease Image and the internet. Language English other languages available on response available on respinidle Lubrication The control | | Tool receiver type and size: | HSK-C63 | | Controls Voltage: | 24V (DC) |
| Spindle Lubrication life time grease Control: Manufacturer: Fanue Spindle Cooling n.a. Spindle Cooling n.a. Spindle Daring size: Diameter 80 mm Operating System: CNC Control with Windows XP-PRO Max RPM: n = 6.300 min-1 Integrated Ladder III PLC Control Integrated Ladder III PLC Control Control with Windows XP-PRO Max Torque: Mt = 175 Nm Manufacturer: Utilizity & Frank Panel - Coint touch screen, alpha-n Spindle Option #2 Manufacturer: Witzig & Frank Panel - Coint touch screen, alpha-n Tool receiver type and size: HSK-C50 Tool receiver type and size: Manual Through Spindle Coolant: To bar Panel - Coint Data Exchange Via PCMCIA or USB Spindle Lubrication Iffe time grease Panel - Coint Network and the internet. Language English other languages available on response av | | Tool clamp / release: | Manual | | Input/Output Voltage: | 24V (DC) |
| Spindle Cooling n.a. Spindle Cooling n.a. Spindle bearing size: Diameter 80 mm Max PPM: n = 6,300 min-1 Max Power: P = 13.5 Kw Max Torque: Mt = 175 Nm Spindle Option #2 Manufacturer: Vitizig & Frank Data Exchange Tool receiver type and size: Manual Tool clamp / release: Manual Through Spindle Cooling n.a. Spindle Lubrication life time grease Spindle bearing size: Diameter 60 mm Spindle Lubrication n = 6,300 min-1 Max Power: P = 8 Kw Max Power: P = 8 Kw Max Power: P = 8 Kw | | Through Spindle Coolant: | 70 bar | | Lighting Voltage: | 24V (DC) |
| Spindle bearing size: Diameter 80 mm Operating System: CNC Control with Windows XP-PRO Max RPM: n = 6,300 min-1 Integrated Ladder III PLC Control Max Power: P = 13.5 Kw Control Panel Quantity Two (2) panels (one (1) / machine side Max Torque: Mt = 175 Nm Control Panel Quantity Two (2) panels (one (1) / machine side Spindle Option #2 Manufacturer: Witzig & Frank Data Exchange Via PCMCIA or USB Tool receiver type and size: HSK-C50 Remote Diagnostics The control allows communication v network and the internet. Tool clamp / release: Manual Through Spindle Coolant: 70 bar Eaglish other languages available on re spindle Locing Spindle boaring size: Diameter 60 mm Optional Equipment Artis or similar torque detection system Max RPM: n = 6,300 min-1 Max RPM: n = 6,300 min-1 Interfaced with the machine control for gauging, bushing press and other equi Max RPM: n = 6,300 min-1 Max RPM: n = 6,300 min-1 Interfaced with the machine control for gauging, bushing press and other equi Max Power: P = 8 Kw Tool Breakage: Artis or similar torque detection system Max Torque: | | Spindle Lubrication | life time grease | Control: | Manufacturer: | Fanuc |
| Max RPM: n = 6,300 min-1 Integrated Ladder III PLC Control Max Power: P = 13.5 Kw Control Panel Quantity Two (2) panels (one (1) / machine side Max Torque: Mt = 175 Nm Panel - color touch screen, alpha-n Spindle Option #2 Manufacturer: Witzig & Frank Data Exchange Via PCMCIA or USB Tool receiver type and size: HSK-C50 Remote Diagnostics The control allows communication v Tool clamp / release: Manual Through Spindle Coolant: 70 bar English other languages available on re Spindle Lubrication life time grease Spindle bearing size: Diameter 60 mm Optional Equipment Max RPM: n = 6,300 min-1 m = 6,300 min-1 Tool Breakage: Artis or similar torque detection system Max Power: P = 8 Kw Max Torque: Mt = 175 Nm Remote Service: Direct remote service via modern from | | | | _ | | |
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| Max Torque: Mt = 175 Nm Panel Type Panel Type Panel J color touch screen, alpha-n MDI keyboard. Spindle Option #2 Manufacturer: Witzig & Frank Data Exchange Via PCMCIA or USB Tool receiver type and size: HSK-C50 Remote Diagnostics The control allows communication vinetwork and the internet. Tool clamp / release: Manual Language English other languages available on response to the internet. Spindle Lubrication life time grease Diameter 60 mm Detempter to manual to reque detection system Max RPM: n = 6,300 min-1 max Power: P = 8 Kw Tool Breakage: Artis or similar torque detection system Max Torque: Mt = 175 Nm Remote Service: Direct remote service via modern from | | | | | i i i i i i i i i i i i i i i i i i i | |
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| Through Spindle Coolant: 70 bar Image: Coolant: 70 bar Spindle Lubrication life time grease Image: Coolant: Image: Coolant:< | | Tool clamp / release: | Manual | | Language | English other languages available on request |
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| Max Torque: Mt = 175 Nm Remote Service: Direct remote service via modern from | | | No. Children and C | - | | |
| | | Iwax Power: | P = 0 NW | | Automation: | gauging, bushing press and other equipment. |
| technicians to assist and evaluate and problem. | | Max Torque: | Mt = 175 Nm | | Remote Service: | Direct remote service via modem from our service technicians to assist and evaluate and resolve a problem |





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