**SERVOCUT 402-AA**

**Automatic Abrasive Cutting Machine**

Programmable with 7" HMI touch screen control, with Siemens PLC control unit, with automatic chop cutting and automatic table-feed cutting  systems,  with various cutting methods, programmable with colored LCD display of cutting parameters, accurate and motorized positioning of the specimen in X - Y and Z axis (X-axis for plane parallel cutting is optional), ergonomic joystick with adjustable speed control, integrated feed path control, power dependent adjustable feed rate, variable cutting force, pulse cutting mode, bar graph overload display, powerful 7.5 kW cutting motor, with unique belt protection system, with variable cutting speed 600-3200 rpm, with electronic brake system, cutting capacity up to 150/130 mm solid stock, with cut-off wheels up to Ø400/350mm, twin T-slotted table(Y-direction only) made of stainless steel, bottom part as rugged alloy base casting, extraordinary access for easy handling with sliding door and side openings, with extra advanced cutting methods: "Rapid Pulse Cutting, Table Oscillation Cutting, Instafeed Cutting, Automatic Chop Cutting, Automatic Table Feed Cutting, Joystick Cutting" Ready  for operation. Without clamping devices, without recirculation cooling tank.

Includes a standard set of cutting consumables composed of;
\*An assortment of 20 cut-off wheels with 400 mm dia.
\*5 lt of Metcool cooling fluid.
400 V, 3 phase, 50/60 Hz.

**Technical Specifications**



|  |  |  |
| --- | --- | --- |
| **Order No** | **15 67** | **15 67-AX** |
| **Model** | **402-AA** | **402-AA-AX** |
| **Max. Wheel Diameter** | Ø400 mm | Ø400 mm |
| **Max. Cutting Capacity, Ø** | Ø150 mm | Ø150 mm |
| **Max. Cutting Capacity, HxD** | #85x350 mm | #85x350 mm |
| **Z-Axis Travel, (mm)** | 255 | 255 |
| **Y-Axis Travel, (mm)** | 300 | 300 |
| **X-Axis Travel, (mm)** | - | 150 |
| **T-Table Dimension, (mm)** | 550x484 | (446+150)x484 |
| **T-Slot Dimension, (mm)** | 12 mm | 12 mm |
| **Cutting Motor Power (S1)** | 7.5 kW | 7.5 kW |
| **Wheel Speed, RPM** | 600-3200 | 600-3200 |
| **Cutting Feedrate, (µm/s)** | 20-5000 | 20-5000 |
| **HMI Touch Screen** | 7 inch | 7 inch |
| **Chop Cutting, Z- Axis** | Auto | Auto |
| **Table Feed Cutting, Y-Axis** | Auto | Auto |
| **Parallel Cutting, X-Axis** | - | Auto |
| **Table Oscillating Cutting** | Standard | Standard |
| **Rapid Pulse Cutting** | Standard | Standard |
| **Smart Feed Control** | Standard | Standard |
| **StepCut; SegmentCut; DiagonalCut** | Optional | Optional |
| **Automatic Cleaning System** | Optional | Optional |
| **Size WxDxH, (cm)** | 114x112x169 | 114x112x169 |
| **Weight** | 600 kgs | 600 kgs |
| **Recirculation Cooling Unit** | 135 lt | 135 lt |

**Accessories**

|  |
| --- |
| **Additional Cutting Methods for SERVOCUT 402** |
| **GR 0925** | Software package for optional cutting methods; |
|   | \*Diagonal Cut |
|   | \*Step Cut |
|   | \*Segment Cut |
|   | \*Combined Cut |
|   |   |
| **Power Supply for SERVOCUT 402** |
| **GR 1224** | Transformer kit for 200-240 VAC, 3 phase, 50/60 Hz mains voltage |
|   |   |
| **Cooling Systems for SERVOCUT 402** |
| **GR 1544** | Recirculation Cooling Tank, 135 lt, for SERVOCUT 502/402 |
| **YM 8815** | Fine filter sheets for recirculation cooling tank (GR 1544), 10 pcs |
| **GR 1559** | Coolant level sensor for recirculation cooling tank |
|   | Informs operator when coolant level is insufficient. (for MA and AA models) |
| **GR 1540** | Magnetic collector rod for recirculation cooling tank |
| **GR 1560** | BANDCOOL Band Filter Unit for SERVOCUT 502/402/302 |
|   | Band filter conveyor for the automatic collection and disposal  |
|   | of swarfs, with capacity of 115 lt, with fluid level indicator, |
|   | complete system on wheels, with connection kit. |
|   | 400V, 3-phase, 50 Hz |
| **YM 8878** | Filter roll for BANDCOOL, 50 m, SRC 302/402/502 |
|   |   |
| **Accessories for SERVOCUT 402** |
| **GR 1554** | FUMEFILTER Centrifugal Separator |
|   | Removes coolant mist for better illumination and viewing |
|   | (To be ordered simultaneously together with the machine order) |
| **YM 8834** | Spare Filter Kit for FUMEFILTER (GR 1554) |
| **GR 0139** | AUTOCLEAN Automatic Cleaning System for cutting chamber |
|   | (To be ordered simultaneously together with the machine order) |
| **GR 0140** | 3-lights warning beacon with audible signal |
|   | (To be ordered simultaneously together with the machine order) |
| **GR 0125** | Laser alignment unit |
|   | (To be ordered simultaneously together with the machine order) |
| **GR 1707** | Manual/Auto Table drive system with electromagnetic clutch(y-axis) |
|   | (To be ordered simultaneously together with the machine order) |
| **GR 0992-01** | Flange Set with larger diameter, Ø133 mm |
| **GR 0997** | Extension Box for cutting long specimens from the left hand side opening,  |
|   | 50 cm length, for SERVOCUT 402 |
|   |   |
| **Clamping Devices for SERVOCUT 402** |
| **GR 0029** | Quick Acting Clamping  Vise Assembly, Right, for SRC 402 (Stainless Steel) |
| **GR 0030** | Quick Acting Clamping  Vise Assembly, Left, for SRC 402 (Stainless Steel) |
| **GR 0154** | Compact Vise Assembly, Spring Loaded, for SRC 402 (Stainless Steel) |
| **15 02** | MBU 1031 Vertical  Clamping Device with clamping shoe, clamping height up to 115mm. |
| **15 04** | MK 10 22 Height Block, 70 mm |
| **GR 0310** | Fastener vise for longitudinal sectioning of screws, ball joint, tubes, etc. from 60 to 100 mm in length |
| **GR 0312** | Fastener vise for longitudinal sectioning of screws, ball joint, tubes, etc. from 90 to 150 mm in length |
| **GR 0609** | Serial Clamping Device for clamping multiple specimens from 1 to 2 |
| **GR 0612** | Angular Precision Clamping Device in 3-Axis Direction |
| **GR 0033** | Chain spanner set with anchor block |
| **15 00** | V-Block for holding parts above table slots |
| **GR 0615** | Adjustable V-Support, Small (Height Range: 57-67 mm) |
| **GR 0616** | Adjustable V-Support, Medium (Height Range: 65-85 mm) |
| **GR 0617** | Adjustable V-Support, Large (Height Range: 85-115 mm) |
| **GR 0618** | Adjustable V-Support, Extra Large (Height Range: 115-155 mm) |
|   |   |
| **Spare Part Kit for SERVOCUT 402** |
| **GR 1964** | Recommended Set of Spare Parts, SERVOCUT 402 |
|   |   |

**Consumables**

|  |
| --- |
| **Treno Series Abrasive Cut-off Wheels (Pack of 10)** |
| **TRENO-NF** | **19-060** | Ø 350 mm, for Non-Ferrous Steels |
| **TRENO-M** | **19-062** | Ø 350 mm, for Medium Hard Steels > 23-55 HRC < |
| **TRENO-S** | **19-063** | Ø 350 mm, for Hard Steels > 50-60 HRC < |
| **TRENO-SS** | **19-064** | Ø 350 mm, for Very Hard Steels > 60 HRC |
| **TRENO-NF** | **19-070** | Ø 400 mm, for Non-Ferrous Steels |
| **TRENO-M** | **19-072** | Ø 400 mm, for Medium Hard Steels > 23-55 HRC < |
| **TRENO-S** | **19-073** | Ø 400 mm, for Hard Steels > 50-60 HRC < |
| **TRENO-SS** | **19-074** | Ø 400 mm, for Very Hard Steels > 60 HRC |
|   |   |   |
| **Diamond Cut-off Wheels (1 pc) for METACUT & SERVOCUT** |
| **DIMOS** | **19-400** | ø 400 Diamond Cut-off wheels  (Metal Bonded, high conc.) |
| **DIMOS** | **19-401** | ø 400 Diamond Cut-off wheels  (Resin Bonded, high conc.) |
|   |   |   |
| **Cutting Fluid** |
| **METCOOL** | **19-902** | Nature Friendly Soluble Oil, 5 lt. |
| **METCOOL II** | **19-905** | Nature Friendly Soluble Oil, 1 lt. |
| **METCOOL-NF** | **19-906** | Nature Friendly Soluble Oil, 5 lt. |
|   |   | Perfect corrosion protection for reactive metals like copper, brass, |
|   |   | cobalt, aluminum, tungsten carbide, etc… |

**Features**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |   |  |   |  |
| Large Cutting Capacity |   | Powerful Cutting Motor! |   | Efficient Sample Cooling and Filtration |
|   |   |   |   |   |
|  |   |  |   |  |
| Instafeed Cutting (Auto Feedrate) |   | Joystick Cutting |   | Advanced Cutting Methods |
|  |   |  |   |  |
| Rapid Pulse Cutting |   | Table Oscillating Cutting |   | Combined Cutting |
|   |   |   |   |   |
|  |   |  |   |  |
| Easy Operation With Touch Screen and Joystick |   | Automatic Cleaning Unit |   | Fumefilter, Fume and Mist Removing Unit |