**SERVOCUT 302-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 4 kW cutting motor, with variable cutting speed 600-4000 rpm, with electronic brake system, cutting capacity up to 110/90 mm solid stock, with cut-off wheels up to ø300/250mm, 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 300 mm dia.
\*5 lt of Metcool cooling fluid.
400 V, 3 phase, 50/60 Hz.

**Technical Specifications**



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| **ORDER NO** | **15 57** | **15 57-AX** |
| **MODEL NO** | **SERVOCUT 302-AA** | **SERVOCUT 302-AA-AX** |
| **Max. Wheel Diameter** | Ø300 mm | Ø300 mm |
| **Max. Cutting Capacity, Ø** | Ø110 mm | Ø110 mm |
| **Max. Cutting Capacity, HxD** | #70x200 mm | #70x200 mm |
| **Z-Axis Travel, (mm)** | 125 | 125 |
| **Y-Axis Travel, (mm)** | 220 | 220 |
| **X-Axis Travel, (mm)** | - | 95 |
| **T-Table Dimension, (mm)** | 444x275 | (395+95)x275 |
| **T-Slot Dimension, (mm)** | 12 mm | 12 mm |
| **Cutting Motor Power (S1)** | 4 kW | 4 kW |
| **Wheel Speed, RPM** | 600-4000 | 600-4000 |
| **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 |
| **Size WxDxH, (cm)** | 94x99x76 | 94x99x76 |
| **Weight** | 250 kgs | 250 kgs |
| **Recirculation Cooling Unit** | 80 lt | 80 lt |

**Accessories**

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| **Additional Cutting Methods for SERVOCUT 302** |
| **GR 0925** | Software package for optional cutting methods; |
|   | \*Diagonal Cut |
|   | \*Step Cut |
|   | \*Segment Cut |
|   | \*Combined Cut |
|   |   |
| **Cooling Systems for SERVOCUT 302** |
| **GR 1675** | Recirculation Cooling Tank, 80 lt, for SERVOCUT 302 |
| **YM 8813** | Fine filter sheets for recirculation cooling tank (GR 0019/GR 1675/GR 1945), 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 1561** | 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 302** |
| **GR 1681** | Cabinet for floor model - SRC 302/GEOCUT 302 |
| **GR 1682** | FUMEFILTER Centrifugal Separator for SRC 302/GEOCUT 302 |
|   | Removes coolant mist for better illumination and viewing |
|   | (To be ordered simultaneously together with the machine order) |
| **YM 8833** | Spare Filter Kit for FUMEFILTER (GR 1682) |
| **GR 0125** | Laser alignment unit |
|   | (To be ordered simultaneously together with the machine order) |
| **GR 1680** | Manual/Auto Table drive system with electromagnetic clutch(y-axis) |
|   | (To be ordered simultaneously together with the machine order) |
| **GR 0991-01** | Flange Set with larger diameter, Ø100 mm |
| **GR 0998** | Extension Box for cutting long specimens from the left hand side opening,  |
|   | 50 cm length, for SERVOCUT 302 |
|   |   |
| **Clamping Devices for SERVOCUT 302** |
| **GR 0170** | Quick Acting Clamping  Vise Assembly, Left, for SRC 302 (Stainless Steel) |
| **GR 0172** | Quick Acting Clamping  Vise Assembly, Right, for SRC 302 (Stainless Steel) |
| **GR 0151** | Compact Vise Assembly, Spring Loaded, for MTC 302/SRC 302 (Stainless Steel) |
| **15 01** | MBU 1011 Vertical  Clamping Device with clamping shoe, clamping height up to 90 mm. |
| **15 03** | MK 10 21 Height Block, 60 mm |
| **GR 0453** | Fastener vise for longitudinal sectioning of screws, fasteners tubes, etc. from 12 to 45 mm in length |
| **GR 0310** | Fastener vise for longitudinal sectioning of screws, ball joint, tubes, etc. from 60 to 100 mm in length |
| **GR 0612** | Angular Precision Clamping Device in 3-Axis Direction |
| **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) |
|   |   |
| **Spare Part Kit for SERVOCUT 302** |
| **GR 1963** | Recommended Set of Spare Parts, SERVOCUT 302 |

**Consumables**

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| **Treno Series Abrasive Cut-off Wheels (Pack of 10)** |
| **TRENO-Ti** | **19-019** | Ø 250 mm, for Titanium and Very Ductile Materials |
| **TRENO-NF** | **19-020** | Ø 250 mm, for Non-Ferrous Steels |
| **TRENO-H** | **19-021** | Ø 250 mm, for Soft Steels < 23 HRC  |
| **TRENO-M** | **19-022** | Ø 250 mm, for Medium Hard Steels > 23-55 HRC < |
| **TRENO-S** | **19-023** | Ø 250 mm, for Hard Steels > 50-60 HRC < |
| **TRENO-SS** | **19-024** | Ø 250 mm, for Very Hard Steels > 60 HRC |
| **TRENO-NF** | **19-040** | Ø 300 mm, for Non-Ferrous Steels |
| **TRENO-H** | **19-041** | Ø 300 mm, for Soft Steels < 23 HRC  |
| **TRENO-M** | **19-042** | Ø 300 mm, for Medium Hard Steels > 23-55 HRC < |
| **TRENO-S** | **19-043** | Ø 300 mm, for Hard Steels > 50-60 HRC < |
| **TRENO-SS** | **19-044** | Ø 300 mm, for Very Hard Steels > 60 HRC |
|   |   |   |
| **Long Life Abrasive Cut-off Wheels (Pack of 10)** |
| **TRENO-DUR** | **19-026** | Ø 250 mm, for Extremely Low Consumption Rate with Optimum Surface |
|   |   | Quality for High Volume Cutting Operations, Cut-Check Applications, etc.. |
|   |   |   |
| **Ultra Thin Abrasive Cut-off Wheels (Pack of 10)** |
| **TRENO-HT** | **19-031** | Ø 250 mm, 1.0 mm thickness, for Soft Steels > 20-35 HRC < |
| **TRENO-MT** | **19-032** | Ø 250 mm, 1.0 mm thickness, for Soft&Medium Hard Steels >38-58 HRC< |
|   |   |   |
| **Cuto Series Abrasive Cut-off Wheels (Pack of 10)** |
| **CUTO-M** | **19-022/A** | Ø 250 mm, for Soft&Medium Hard Steels up to 50HRC |
| **CUTO-S** | **19-023/A** | Ø 250 mm, for Hard Steels > 50-60 HRC < |
| **CUTO-M** | **19-042/A** | Ø 300 mm, for Soft&Medium Hard Steels up to 50HRC |
| **CUTO-S** | **19-043/A** | Ø 300 mm, for Hard Steels > 50-60 HRC < |
|   |   |   |
| **Diamond Cut-off Wheels (1 pc) for METACUT & SERVOCUT** |
| **DIMOS** | **19-250** | ø 250 Diamond Cut-off wheels  (Metal Bonded, high conc.) |
| **DIMOS** | **19-251** | ø 250 Diamond Cut-off wheels  (Resin Bonded, high conc.) |
| **DIMOS** | **19-300** | ø 300 Diamond Cut-off wheels  (Metal Bonded, high conc.) |
| **DIMOS** | **19-301** | ø 300 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**

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|  |   |  |   |  |
| Small Footprint, 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 |   | Magnetic Collector Rod Set |   | Fumefilter, Fume and Mist Removing Unit |