

Technical Data Sheet Pneumatic Jet Chisel Scaler

Product Brief Introduction:

The pneumatic jet chisel scaler is a high-efficiency air-driven surface treatment tool, also widely known as a needle scaler. Power by compressed air, it drives multiple high-strength steel needles to generate high-frequency reciprocating impact force, achieving rapid removal of rust, welding slag, old paint, oxide scale, dirt and residual attachments on metal surfaces.

1. Product Introduction

This series of pneumatic jet chisel scaler (JEX-24/JEX-28(JEX-66) /JC-16/JT-20) adopts an optimized pneumatic transmission structure and an original air-driven needle return mechanism, eliminating traditional spring accessories. The whole hand tool is compact in structure, ergonomically designed, easy to hold and operate, and greatly reduces operator fatigue during long-hour continuous operation.

The equipment supports adaptive fitting of various irregular surfaces. The bundled steel needle group can automatically adjust the angle and fit curved surfaces, grooves, gaps and uneven work pieces to realize all-round dead-angle-free cleaning. It is widely adaptable to heavy-duty industrial cleaning, post-weld treatment, equipment maintenance and old surface renovation scenarios, with low air consumption, high working efficiency and long service life, meeting the continuous operation needs of, shipyards, construction and engineering maintenance projects.

Featuring no dead-angle cleaning, stable power output and lightweight body, it is a core essential tool for industrial surface polishing, derusting and renovation operations, suitable for complex curved surfaces, corners and narrow working spaces.

2. Product Parameter (specification)

IMPA Code	Model	Needles	Inlet	Consumption	Weight
590461	JC-16	Dia.2mmx29pcs	3/8"	0.1m ³ /min	1.4kg
590462	JT-20	Dia.2mmx29pcs Dia.3mmx12pcs	3/8"	0.2m ³ /min	2.4kg
590463	JEX-24	Dia.2mmx53pcs Dia.3mmx23pcs	3/8"	0.27m ³ /min	2.7kg
590464	JEX-28	Dia.2mmx66pcs Dia.3mmx28pcs	3/8"	0.25m ³ /min	2.5kg

3. Product feature

- **Stable & Efficient Pneumatic Structure:** Adopts air-driven needle return design without spring parts, eliminating spring fracture, jamming and power instability failures. It delivers continuous and uniform high-frequency impact force, ensuring consistent derusting and cleaning effect with highworking efficiency.

- **Full Dead-Angle-Free Cleaning:** The flexible steel needle group can automatically fit irregular surfaces such as curves, grooves, corners and gaps. It perfectly solves the cleaning difficulty of complex workpieces and realizes thorough removal of stubborn rust, welding spatter, oxide scale and old paint layers.
- **Ergonomic & Labor-Saving Design:** The lightweight fuselage and anti-slip grip structure effectively reduce hand vibration and operating pressure. It supports long-time continuous operation without obvious fatigue, improving overall construction efficiency and operator comfort.
- **Durable & Low Maintenance:** The core components are made of high-strength alloy materials, with wear resistance, impact resistance and corrosion resistance. The steel needle is replaceable, and the disassembly and replacement process is simple and fast, greatly reducing equipment maintenance time and use cost.

4. Application

The pneumatic jet chisel scaler is widely used in industrial surface pretreatment, equipment maintenance and engineering renovation, covering Shipbuilding & Marine, Steel Structure Engineering, Petroleum & Chemical Industry etc. where high efficiently derusting is required.

5. Product Details

- **Core Needle Group:** Adopts high carbon steel needles, with strong impact resistance and wear resistance, not easy to bend and break. The needle set is arranged evenly, with concentrated impact force and uniform cleaning effect.
- **High-Precision Cylinder Body:** The cylinder body is finely processed with high sealing performance, effectively avoiding air leakage and power loss, ensuring stable output of impact frequency and force during long-time operation.
- **Quick-Connect Air Nozzle:** Standard 3/8" universal air inlet, supporting fast plug-in, convenient for quick assembly and disassembly on site, saving time.
- **Integrated Protective Shell:** The high-strength engineering plastic shell is anti-drop and anti-collision, which can effectively protect internal pneumatic components and adapt to harsh industrial construction environments.
- **Replaceable Accessories:** Steel needles, needle supporter, pistons and other wearing parts are universal and standardized, easy to replace.

6. FAQ

Q1: What air pressure is suitable for the tool to work normally?

The standard working air pressure is 0.5-0.7 MPa. It is recommended to match a conventional industrial air compressor for stable air supply.

Q2: How to replace and maintain the steel needles?

Loosen the front fixing nut of the tool, take out the old needle group, replace with new standard steel needles, and tighten the nut evenly.

Q3: Is the tool suitable for outdoor and humid environment operation?

Yes. The tool is pneumatically driven without electronic components, with good waterproof and moisture-proof performance. It is safe for outdoor, humid, flammable and explosive working environments, and has no electric leakage safety hazard compared with electric tools.

Q4: How long is the product service life and warranty period?

Under standard use and regular maintenance, the service life of the main body is more than 3 years, and the wearing parts (steel needles, sealing rings) need to be replaced regularly according to the use frequency.

Q5: Can the tool clean deep rust and thick paint layers?

Yes. The high-frequency strong impact force can quickly break and peel off thick rust layers, old paint layers and hard oxide scale. For extra-thick attachments, it is recommended to increase the working time appropriately or choose high-power models (JEX-28) to improve cleaning efficiency.

