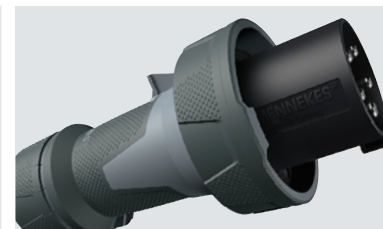


POWER YOUR MINE

SOLUTIONS FOR SURFACE AND UNDERGROUND MINING

 **MENNEKES**

MY POWER CONNECTION



 You can find more information on our website



Power your Mine

Safe power distribution above and below ground.

In few industries do tools and materials take such a heavy beating as in mining. Top-quality products are a must for withstanding the typically harsh conditions, both above and below ground.

Constant exposure to dirt, dust and moisture is the rule rather than the exception. This calls for solutions that are designed to last. To consistently deliver them, at MENNEKES we thoroughly test every product in our own labs. We know that when the going gets rough, miners need to be able to depend on their equipment 100%.

Besides the quality of industrial plugs and sockets, ease of use is also essential for safe, efficient work. This starts with dependable connections. Solutions from MENNEKES make sure that everything works smoothly.

It doesn't matter whether you're engaged in extracting salt, potash, lignite or whatever—the quality of our products sets standards across the board. Custom solutions to meet special requirements are also an important part of our business. You can count on the experts of the MENNEKES sales team for sound technical advice and capable support –worldwide!



Contents



Plugs and sockets



Receptacle combinations



Intelligent solutions worldwide



We are MENNEKES



Plugs and sockets for Everyday Use.



Lots of connectors are used in every mining operation. They need to constantly withstand dirt, dust, water and considerable mechanical stresses, especially underground. High quality and long life are therefore essential, since every downtime caused by loss of power can quickly incur huge costs. MENNEKES supplies both mobile plug-and-socket solutions and wall mounted receptacles that are optimally designed and built to withstand the brutal conditions typical of the mining industry.

For example, our inlets and the 63 A and 125 A plugs and connectors of the PowerTOP Xtra family boast highly heatresistant contact carrier and nickel plated contacts. This ensures dependable connections and high resistance, also in aggressive atmospheres.

Our wall-mount receptacles with DUO interlock also deliver outstanding user-friendliness in a robust enclosure. The contact screws can all be reached from the front, and they can only be inserted or removed when there is no power.

Our plugs and sockets are also available with IP44 and IP67 protection ratings. All 63 A and 125 A connectors and receptacles feature X-CONTACT, the new MENNEKES sleeve technology that reduces the effort required for insertion and withdrawal by up to 50%.

Plugs and sockets for Everyday Use.

1

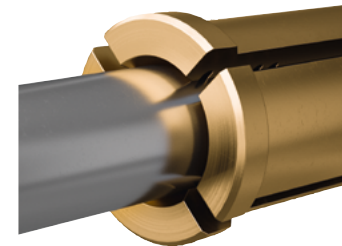
PowerTOP Xtra in 63 A and 125 A

- Rubberized non-slip grip zones
- Frame terminals
- Highly heat-resistant contact carrier
- Nickel plated contacts
- IP67 protection class



X-CONTACT

- Up to 50% less effort for insertion and withdrawal
- Even the 125 A model can be operated by one person
- Safer handling and contact closure
- Wear-resistant
- Self-cleaning



2

DUO wall mounted receptacle

- Switched; mechanical interlock
- Padlockable
- Detent lug holds bayonet ring in place when opening for effortless closure
- Foamed enclosure seals for added safety: silicone-, CFC- and halogen-free



Here you can find the advantages of our DUO wall mounted receptacles



Here you can find our assembly video of our DUO wall mounted receptacles



Here you can find the advantages of our PowerTOP Xtra family





Plugs and sockets for Special Requirements.

MENNEKES also has a heavy-duty series for nominal currents up to 200 A, 250 A and 400 A and nominal voltages up to 1,000 V. In these high-current versions the contacts are silver-plated for superior electrical conductivity and corrosion protection. In the 250 A and 400 A versions, damaged contact parts can be replaced from the front, so there's no need to disconnect the line.

The enclosures of wall mounted receptacles take a particularly great beating in mining, so their materials have to be robust. MENNEKES employs AMELAN, a highly chemicalresistant plastic, for products used in highly aggressive environments.

The DUO wall mounted receptacle made of AMELAN for up to 500 V is therefore especially apt for underground use. Its standard features include highly heat-resistant, nickel plated contacts, which add to its service life in mining applications.



Plugs and sockets for Special Requirements.

1

High-current plugs and connectors

- 200-400 A
- Contacts with protective coating
- Robust quality and long life
- Highly reliable
- Wall mounted receptacles with mechanical or electrical locking



2


DUO AMELAN wall mounted receptacle


- X-CONTACT
- Highly resistant to chemicals
- Highly heat-resistant contact carriers and nickel plated contacts
- Mechanically disengageable lock



AMELAN is resistant to (among others):

- Caustic soda
- Motor oils
- Caustic potash
- Diesel oil
- Gasoline
- Aqueous ammonia

Here you can find the advantages of our DUO wall mounted receptacles 

Here you can find our assembly video of our DUO wall mounted receptacles 

Receptacle combinations

From professionals for professionals!



Where tunnels and shafts meet, more than isolated wall receptacles are needed. For these key locations, MENNEKES offers an ideal range of receptacle combinations including both standard and custom-configured products. Its standard features include highly heat-resistant, nickel plated contacts, which add to its service life in mining applications. Robust and easy to install—this makes AMAXX a success all the way down the line!

AMAXX combinations already have a highly robust plastic enclosure as a standard feature. For mining applications requiring enhanced resistance to aggressive environments, the AMAXX enclosures made of AMELAN are the best choice.

AMAXX is prewired and ready to connect, and every unit is individually tested for electrical safety and quality in compliance with IEC 61439. A certificate is issued as proof of quality for every AMAXX combination.

For especially cramped areas with limited space on the ground and walls, MENNEKES has the ideal solutions: the Delta-BOX. An included hook can be used to suspend this compact combination of CEE and SCHUKO® receptacles directly over where work is being done. This way no one can trip over the Delta-BOX in narrow tunnels, and it's also exposed to less dirt and water.



Receptacle combinations

From professionals for professionals!

1

AMAXX receptacle combination

- Protection classes IP44 and IP67
- Prewired for fast connection
- Hinged to the side
- Fusing behind a transparent cover
- Tested acc. to IEC 61439
- Customer-specific versions



2

Delta-BOX

- For hanging
- Internal strain relief and hanging hook
- Protection classes IP44, IP67 and IP68
- Flexibly configurable



Here you can find our AMAXX product video

Receptacle combinations

Mobile and sturdy!

In mining, mobile applications are often essential for ensuring flexible work. MENNEKES provides a variety of mobile distribution solutions to meet these requirements.

The mobile EverGUM combination unit, for example, is compact and made of a highly shock-resistant material. It excels with high dielectric strength and resistance to leakage current and is highly recommended for mobile use in heavily soiled and moist environments.

The EverBOX is even more versatile. It can be used for currents between 16 and 125 A, and the sturdy frame reliably protects Receptacles and installed equipment. The fusing with easily accessible protective devices is in plain sight behind seethrough covers.

AMAXX receptacle combinations are naturally also available as easy-to-carry versions for reliable on-site distribution.





Receptacle combinations

Mobile and sturdy!

1

EverGUM receptacle combination

- Raised to keep water out
- Robust and shock-resistant
- High dielectric strength and resistance to leakage current
- Yellow warning color
- Available with or without feeder cable



2

EverBOX

- Receptacles and installed devices protected by sturdy frame
- Integrated grips for easy handling
- Supports up to 125 A



3

AMAXX receptacle combination

- AMAXX receptacle combination
- Available with or without feeder cable
- Variable components



Here you can find our AMAXX product video



In Use Worldwide

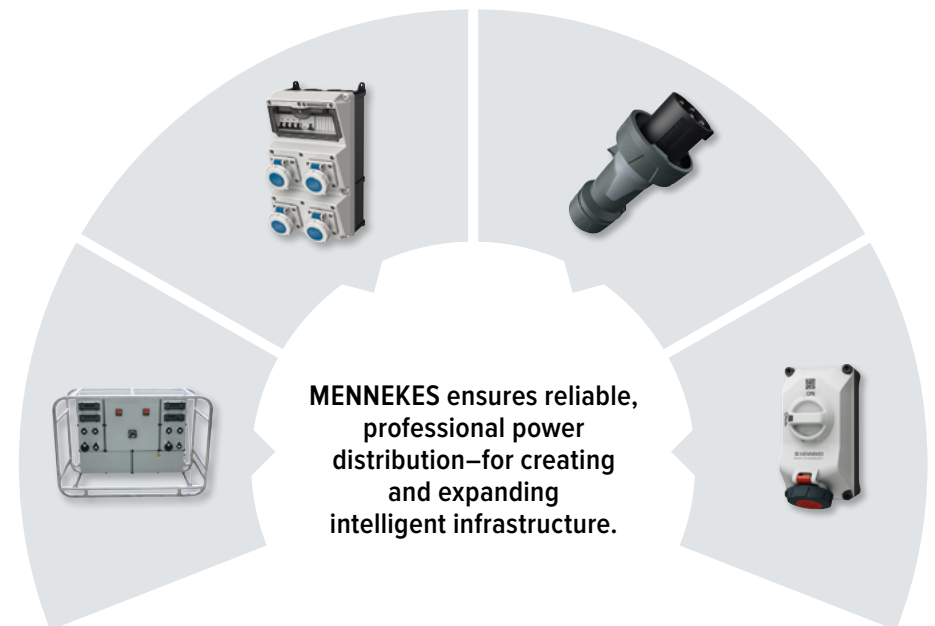
Greatly appreciated everywhere!

High-quality MENNEKES products are used daily in countless mining operations around the globe, both above ground and underground. Their best credentials are a large number of reference projects carried out with satisfied customers in countries worldwide. Add to this the countless possible uses for our large range of flexibly combinable products, backed by our passion for developing customer-specific solutions and supplying any number of units starting with one—worldwide.

References:

- Copper Mines
- Gold Mines
- Silver Mines
- Salt mines
- Potash mining
- Lignite
- Hard coal
- Zinc mines
- Tin mines

To learn more about our worldwide references, visit www.MENNEKES.org



Contact persons at MENNEKES.



Do you have questions about our solutions and products?
You can find our contact persons on our website:



MY POWER CONNECTION

We are MENNEKES.

The MENNEKES Group is the world's leading provider of industrial plugs and sockets and e-mobility charging solutions. Our „type 2“ charging plug has been the official standard connector for electric vehicles throughout the European Union since 2014. Since our family-owned company was founded in Germany's Sauerland region back in 1935, it has spread around the world and is currently represented in 90 countries by subsidiaries with a total workforce of around 1,400 employees.



We produce plugs and sockets, receptacles and receptacle combinations in a vast range of types and models.

Our robust, long-lived solutions are deployed wherever electric power needs to flow reliably and consistently: in industrial applications, railway and transport companies, mining and shipbuilding industry, in container ports and at airports, on trade exhibitions, in stadiums and data centers. In the field of e-mobility, MENNEKES supplies appropriate solutions and equipment for future mobility. Our range includes charging plugs and cables, intelligent charging columns and wallboxes, billing services and a network of trained installers – for private, industrial, commercial and public applications. For the automotive industry and its suppliers, we also make charging inlets and cables for electric cars.