

05.05.2022 | Press Release Special Cable

Robust Super-Versatile Cable for the Chemical and Construction Industry by HRADIL

HRADIL Spezialkabel presents a drum-reeling hybrid cable for power transmission which also includes Cat7 ethernet, fibre optic cable, CAN Bus, pneumatic and hydraulic hoses.

HRADIL Spezialkabel who are based in the Stuttgart region present a drum-reeling hybrid cable for demanding tasks in the chemical industry. Other potential applications include the construction industry, civil engineering projects and tunneling work for heavy construction machinery and tunnel boring machines. In addition to the hoses at the central core that serve pneumatic and hydraulic supply applications the hybrid cable also includes Can bus cables, a 75 Ohm coax cable, Cat 7 ethernet as well as fibre-optic cables. The Hybrid-Multi-Ethernet cable by HRADIL performs safety-relevant tasks in real time. It is predestined for use in hydraulic and/or pneumatic applications including remote monitoring or video surveillance and control tasks, the transmission of sensor and real time data and power transmission. Thanks to its innovative design and choice of materials, the HRADIL hybrid cable attains extraordinary mechanical properties and withstands a tensile strength of up to 10,000 N. The HRADIL hybrid cable is available from a minimum length of 200 meters. Hradil can ship most of its special and standard cables within a few weeks after order release.

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Fig. 1: Drum-reeling hybrid cable by HRADIL Spezialkabel for the chemical and construction Industry
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„Industrial users today have come to expect ever more versatility from a cable” as Alfred Hradil, Managing Director at HRADIL Spezialkabel knows from experience. To save costs, maintenance efforts and space, different functions that in the past were performed by several different cables, today are united in one hybrid cable. However, this can only be achieved where solutions have been found which in terms of engineering, design and choice of material permit the combination of multiple purposes in a single cable.



*Fig. 2: Drum-reeling hybrid cable by HRADIL Spezialkabel for the chemical and construction industry
(MISTER DIN / shutterstock.com)*

HRADIL now present a hybrid cable that brings together four capabilities or functions in a single cable: Ethernet in accordance with category 7 for the transmission of real-time data, power transmission up to 1,000 volts, real-time control tasks thanks to the CAN Bus, image and video data using the coax and the fibre-optic cables to transmit signal and control signals at very high data transmission rates. Furthermore, the hybrid cable was designed to survive robust outdoor usage over several years even in the harshest climate conditions and it excels in drag chain applications where it withstands extreme tensile and torsional loads.

Innovative cable design

Engineers at Hradil have equipped the Hybrid-Multi-Ethernet Cable with fibre-optic cables, Cat7 control cores and sensor cables to support multiple-purpose data transmission. The cable jacket is resistant against oil, gasoline and sea water and also against cooling fluids, lubricants and cold cleaner.

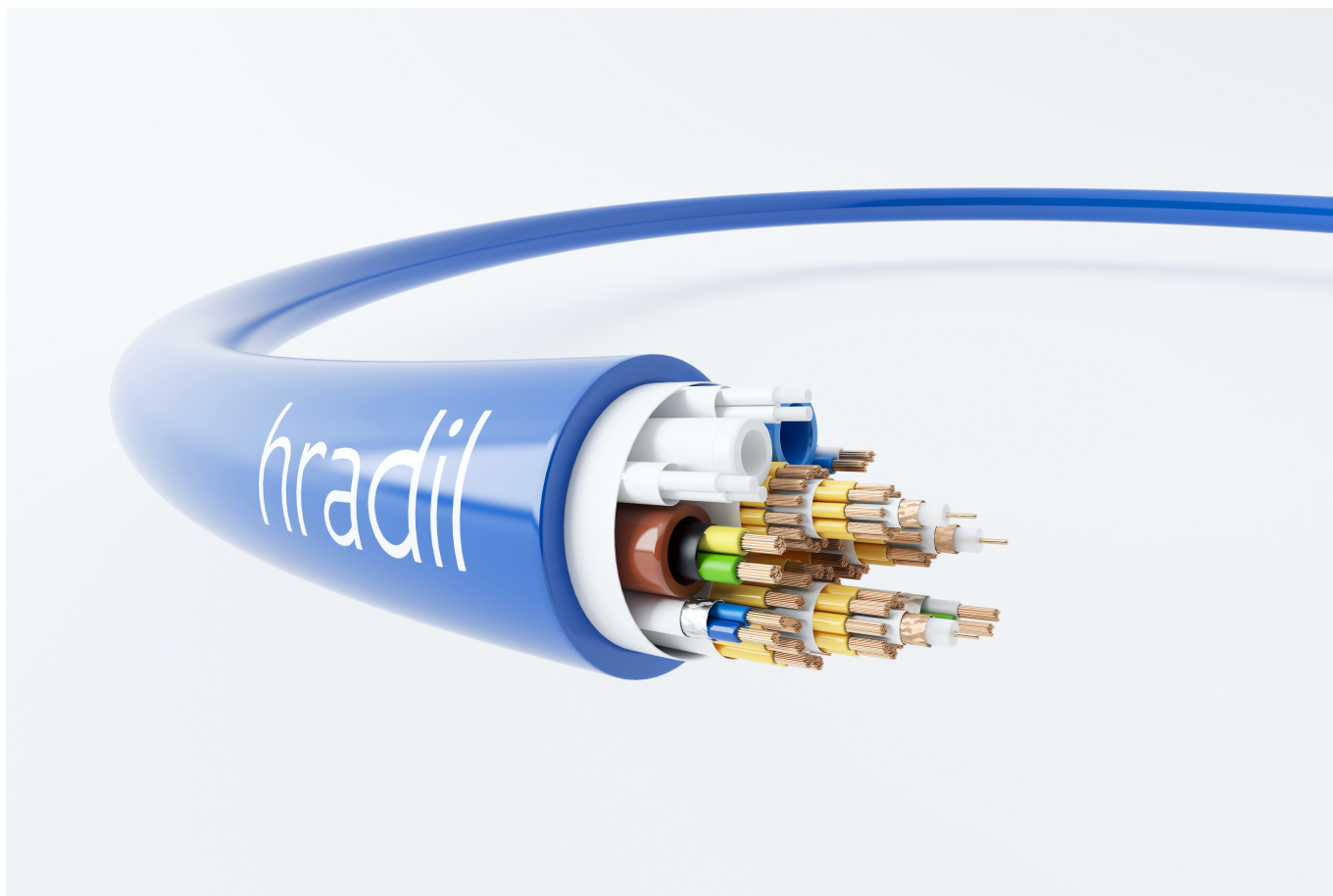


Fig. 3: Drum-reeling hybrid cable by HRADIL Spezialkabel for the chemical and construction industry - Longitudinal view



Fig. 4: Drum-reeling hybrid cable by HRADIL Spezialkabel for the chemical and construction industry - cross-section

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