

Weighing Solution for Cable Compound

Say goodbye to errors and waste unlock continuous and batch precision feeding!

Precision · Stability · Traceability

Material Properties and Applications

As the core material of wires and cables, cable compounds determine the electrical safety, mechanical strength, and service life of cables. In terms of performance, through polymer modification technology, cable compounds possess excellent special properties such as electrical insulation, heat aging resistance, environmental stress cracking resistance, and flame retardancy and smoke suppression, enabling them to withstand harsh conditions such as high temperature, humidity, and corrosion. They cover key fields including power transmission, communication networks, rail transit, new energy equipment, building wiring, and marine engineering.



Flame Retardancy & Fire Protection

Inhibit cable ignition, block flame spread, and enhance operational safety



High Temperature Resistance

Withstands external heat sources and adapts to high-temperature working environments



Durable and Long-lasting

Excellent toughness, cables are not prone to breaking when bent, ensuring long service life



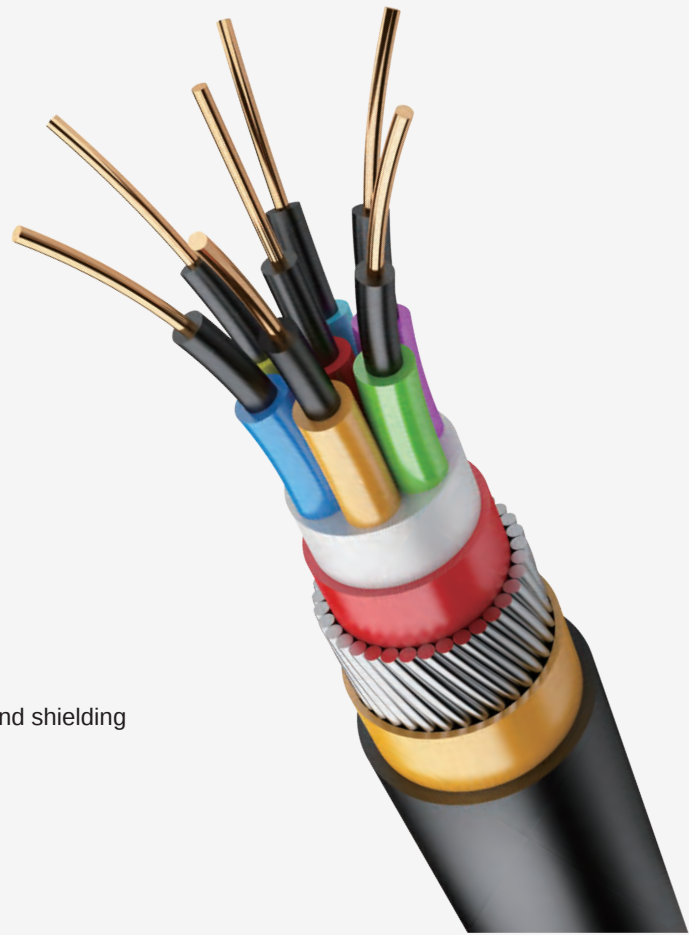
Chemical Resistance

Resists chemical medium corrosion and adapts to complex working conditions



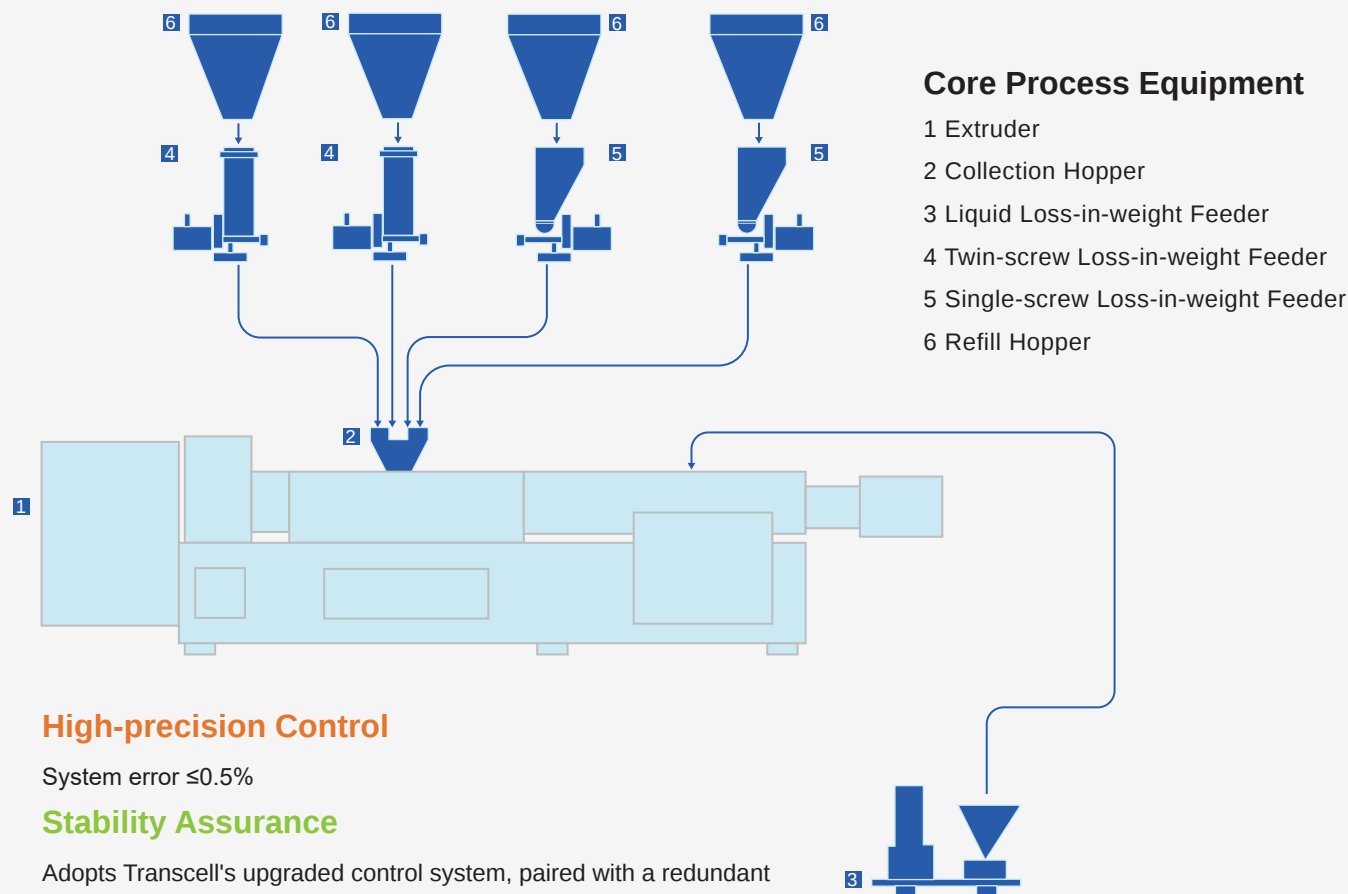
High Voltage Compatibility

Meets the material requirements for insulation and shielding layers of medium and high voltage cables



Cable Compound: Chemical Crosslinking Production Line

Taking the cable compound chemical crosslinking production line as an example, the formula consists of 1–2 types of PE resin pellets, antioxidant powder, and DCP liquid. Although the formula is simple, the mixing uniformity requirements are extremely high!



High-precision Control

System error $\leq 0.5\%$

Stability Assurance

Adopts Transcell's upgraded control system, paired with a redundant control interlock system, ensuring stable and reliable long-term operation;

Professional electrical integration design, with power isolation inside and outside the cabinet; components sourced from international or joint-venture brands to enhance overall reliability;

Both servo systems and sensor systems use manufacturer-customized anti-interference shielded cables, ensuring more stable signal transmission;

Both pumps and sensors are equipped with internationally renowned brands, offering higher precision, stronger long-term stability, and more powerful functions.

Bridge-breaking Design

The powder section adopts vertical extended hoppers, realizing the concept of power-free bridge breaking within the extended hopper;

Green Production, Clean Emission, Safe Maintenance

Dual exhaust port design, which can be connected to positive pressure balancing pipelines, keeping the site environment cleaner;

The gravimetric feeder is equipped with an on-site maintenance switch for convenient daily operation and maintenance;

Integrated Automation

Supports multiple communication protocols such as MODBUS TCP/RTU and PROFINET.

Technical
Advantages



Project Case

Transcell's loss-in-weight feeders have accumulated extensive application experience in the fields of chemically crosslinked compounds, silane crosslinked compounds, halogen-free flame-retardant compounds, semiconductive shielding compounds, and TPE/TPU cable compound modification.

These cable materials often involve high-precision continuous metering and feeding control of multiple raw material components during the modification process, placing extremely stringent requirements on process stability.

In response to the characteristics of different materials, Transcell, drawing on years of practical experience, is able to precisely select the most suitable models and, combined with targeted designs, effectively meet the high process stability requirements of various materials, thereby ensuring the smooth operation of material reactions and ultimately guaranteeing the consistency and reliability of material performance.





Single/Twin-screw Loss-in-weight Feeder

- Easy-to-clean design, OEB2 design as standard;
- Multiple screw and barrel options available; customized solutions for special materials;
- Feeding screws are all manufactured with integrated turning process, featuring uniform screw lead, minimal runout, and precise discharging;
- Key components are independently designed and produced, with complete spare parts inventory and short replacement cycles;
- The independently developed controller offers fast computing speed, strong anti-interference capability, and high communication reliability;
- The operating system adopts an industrial computer design, featuring intelligent formula management and automatic determination of material-feeder compatibility;
- The twin-screw gravimetric feeder is equipped with an independent horizontal stirring paddle, providing outstanding bridge-breaking capability.



Liquid Loss-in-weight Feeder

- Diaphragm pump or gear pump can be selected and adapted according to material characteristics;
- Capacity range: 1–500 L/H;
- Back pressure range: 20–100 bar (depending on specific materials and capacity);
- Suitable for various materials: silane, DCP, BDP, white oil, wax oil, etc.;
- Metering accuracy: $\leq 0.5\%$;
- Material contact surface material: SS304 or SS316 optional;
- Flexible connections, seals, and pump diaphragms are made of PTFE;
- Optional electrical explosion-proof function; other special requirements can be supported with customized designs and rapid response.



FOCUSED ON SOLID AND LIQUID LOSS-IN-WEIGHT FEEDING SYSTEM SOLUTIONS

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