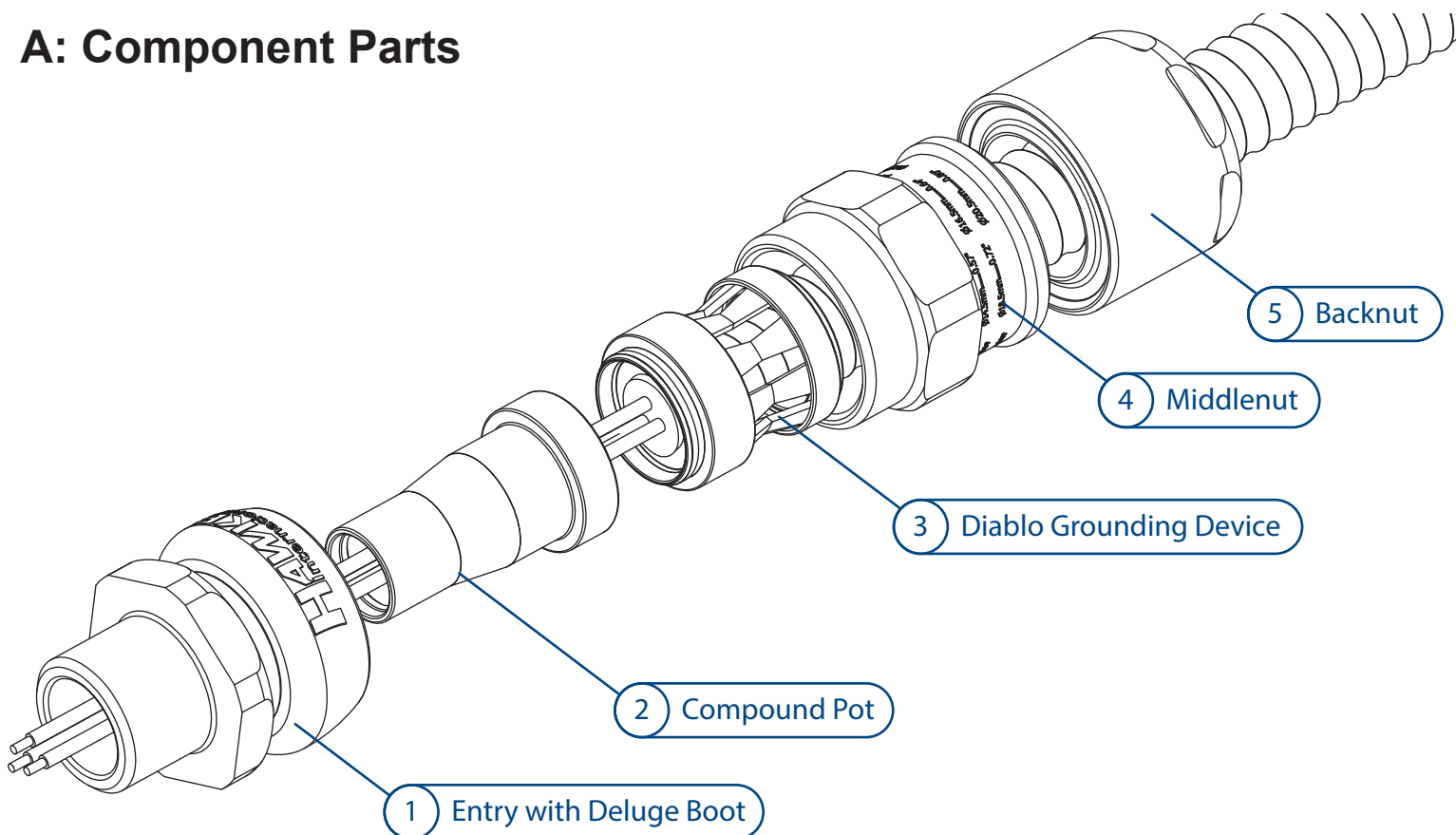


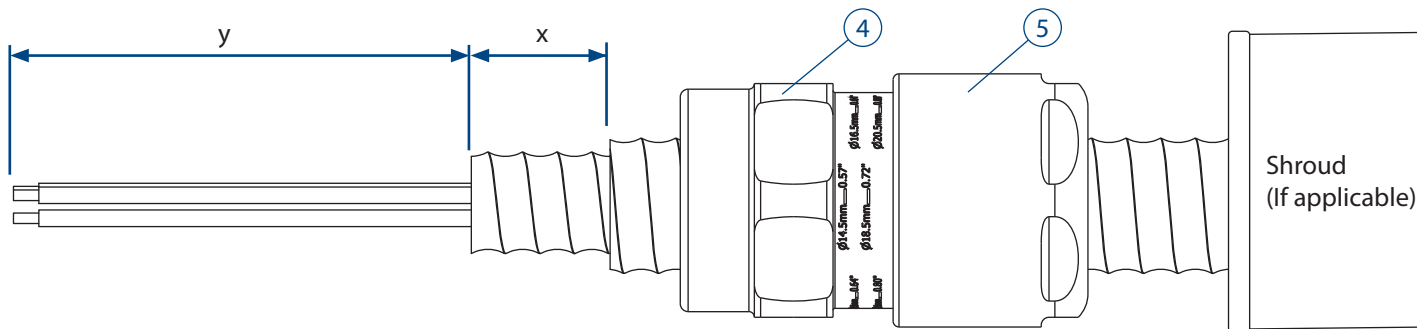
A: Component Parts



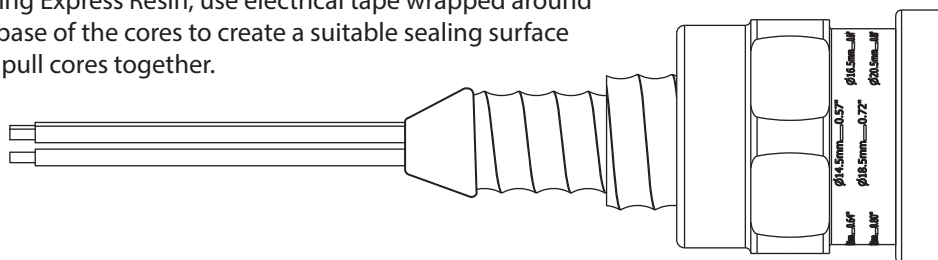
B: Cable Preparation

Strip cable to expose metal clad sheath. Strip length to suit equipment. Slide shroud (if applicable), backnut ⑤ and middlenut ④ onto cable. For preparation of Drain Wires see separate AI 2028.

| Strip Lengths | | | | |
|---------------|-------------------|-------|-------|-------|
| Dim | Gland Size | | | |
| | A,B | C, C2 | D, E | F |
| x | 0.70" | 0.83" | 1.24" | 1.34" |
| y | To suit equipment | | | |



If using Express Resin, use electrical tape wrapped around the base of the cores to create a suitable sealing surface and pull cores together.

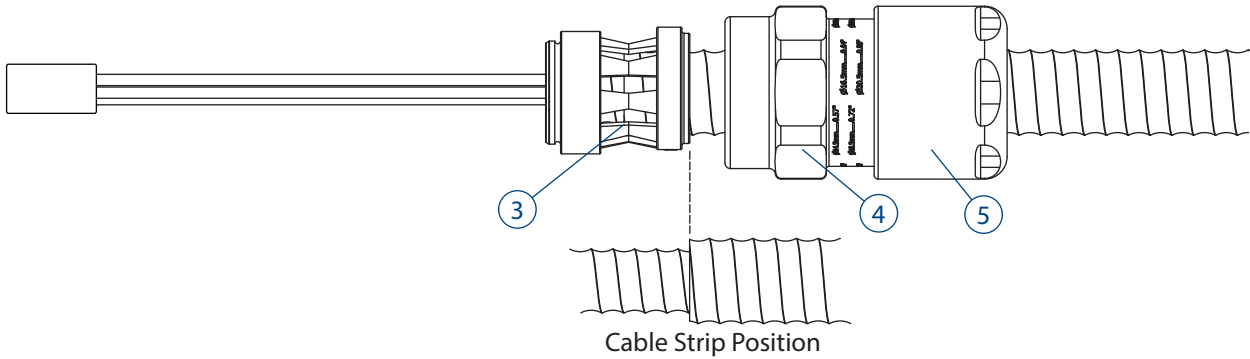


C: Installing Cable Gland

STEP 1: Fit Diablo

Apply electrical tape to core ends to prevent damage to rubber resin dam.

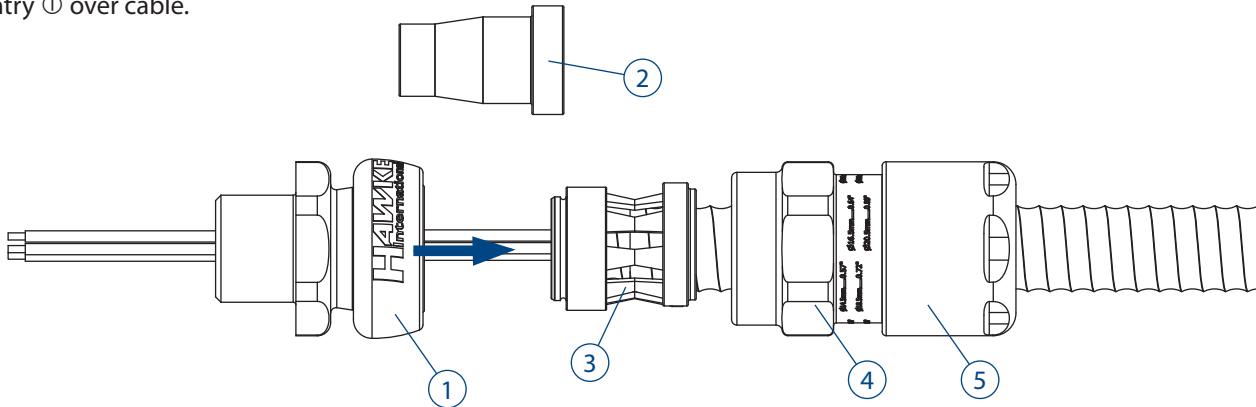
Slide diablo ③ onto cable. Ensure that diablo ③ is positioned over the exposed metal clad sheath, with the rear end of the diablo at the point where the cable is stripped as shown below. Remove tape.



STEP 2: Prepare to Clamp Armour/Braid

Ensure compound pot ② is removed from assembly.

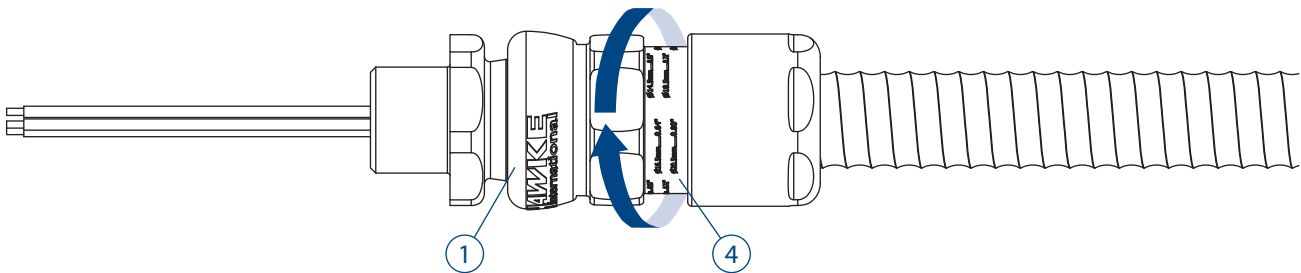
Slide Entry ① over cable.



STEP 3: Engage Diablo

Ensuring that the diablo stays in place, tighten the middle nut ④ onto the entry ① with a wrench until the diablo grips the metal clad sheath.

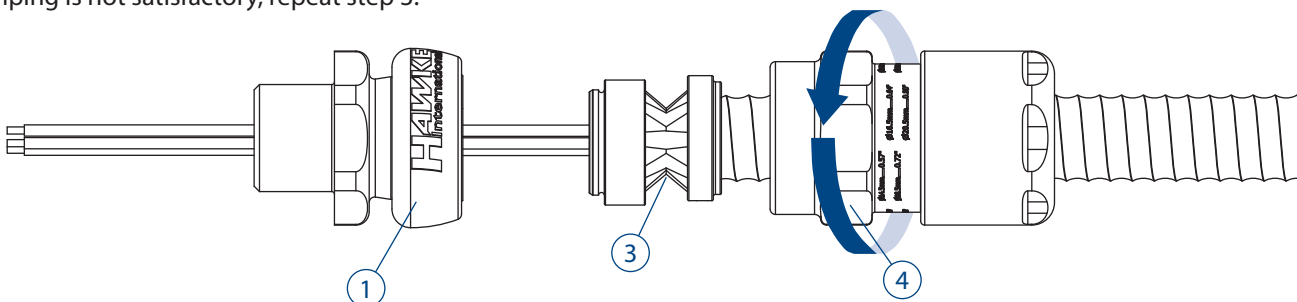
Tighten the middle nut ④ a further half turn with a wrench.



STEP 4: Inspect Armour/Braid

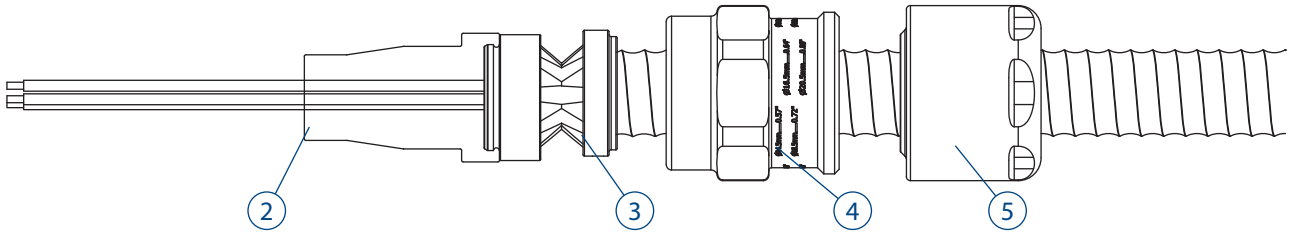
Unscrew the middle nut ④ and visually inspect that the diablo ③ has adequately clamped the metal clad sheath.

If clamping is not satisfactory, repeat step 3.



STEP 5: Fit Compound Pot

Fit the pot ② and check that the resin barrier is sealing on the taped cores.



STEP 6: Pot gland with compound

Gland assembly is now ready for compound. Refer to the correct instructions depending on compound type. These instructions are supplied with the compound.

HAWKSEAL

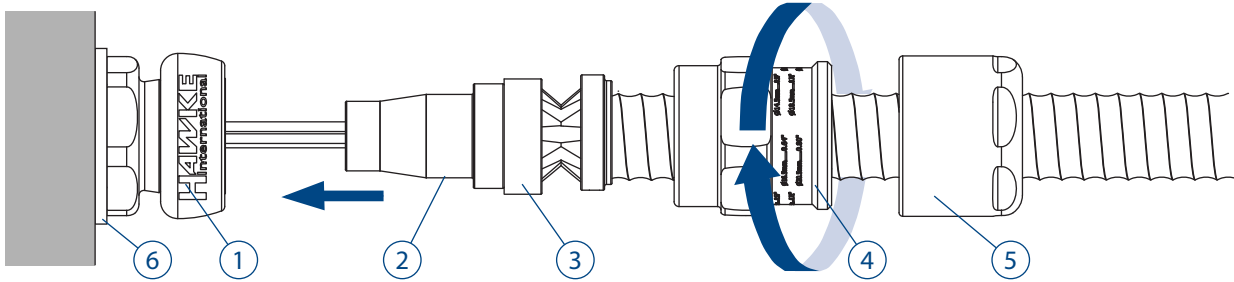
2-Part Epoxy Putty
See AI 2034

EXPRESS

2-Part Pouring Epoxy Resin
See AI 2035

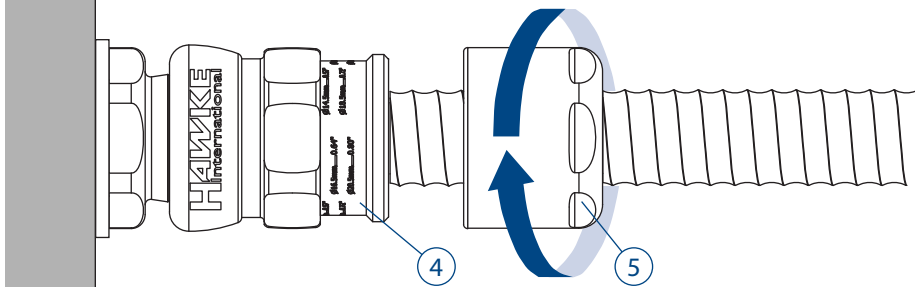
STEP 7: Fit to Enclosure

Now potting the gland is complete, use a wrench to fit entry ① into enclosure. If required, use the appropriate IP washer ⑥. Slide cable through entry ① until pot ② is seated in the entry. Hand tighten the middle nut ④ to entry and add 1/5 - 1/4 turn with a wrench.



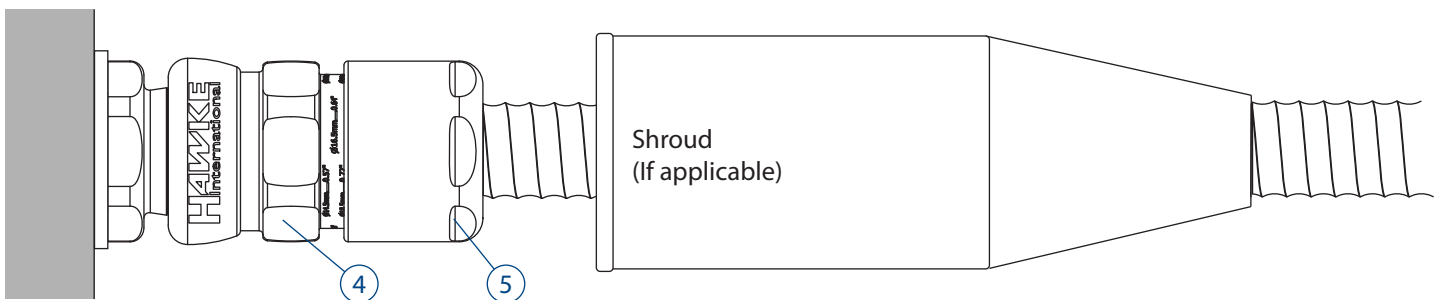
STEP 8: Install Backnut

Hand tighten the backnut ⑤ until a seal is formed around the cable. Use a wrench/spanner to grip the middle nut ④. While preventing the middle nut ④ turning, use a second wrench to apply one further full turn to the backnut ⑤.



STEP 9: Inspect Backnut

Use the middle nut ⑤ guide as an indication that the backnut ⑥ is in the correct position to suit cable diameter. A diameter scale below is provided to assist this process. Slide shroud over cable gland if applicable.



TECHNICAL DATA

Cable Gland Type: 711
Equipment Type: American Series Barrier Cable Glands
Ingress Protection: IP66, IP67, IP68*, IP69, Type 4X
 *30m for 7 days to EN60529 with thread sealant; 10m for 24hrs no thread sealant; A-C sizes only
Operating Temp: -50°C to +80°C (UL)
 -60°C to +80°C (ATEX/IECEX)

ACCESSORIES

Hawke offer the following accessories to enable correct ingress protection and grounding of cable gland.

Shroud: For additional corrosion protection
Locknut: To secure gland into position
Sealing Washer: For additional ingress protection
Earth Tag: For external bonding point
Serrated Washer: To prevent vibration loosening locknuts

INSTALLATION NOTES

- All cable glands must be installed by a suitably trained and competent individual.
- Entry threads are in accordance with Metric BS3643 or ANSI/ASME B1.20.1
- Installer must check material compatibility with enclosure and environment.
- To maintain IP66/IP67/IP69, Hawke certified sealing washer or other approved sealing method must be used.
- Sealing face surface must be smooth and free from damage
- Wall thicknesses depended on thread length or retention type (locknut etc). Exd must maintain the requirements of IEC/EN 60079-1
- All entries must be installed perpendicular to the mounting surface.

SPECIFIC CONDITIONS OF USE

- When the gland is used for increased safety, the entry thread shall be suitably sealed to maintain the ingress protection rating of the associated enclosure.
- Compound cross section must be minimum 20% of total area over a depth of 20mm.

CERTIFICATION DETAILS

UL: Class I, Zone 1, AEx d IIC, Ex db IIC Gb, AEx e IIC, Ex eb IIC Gb; Zone 21, AEx tb IIIC, Ex tb IIIC Db
 Class I Div 1 ABCD, Class II Div 1 EFG & Class III
 UL listed for use with ITC-HL, MC-HL, MC, TECK90, RA90
 Listing No. E84940

TORQUE VALUES

All torque values below were generated on metallic mandrels. For cable, it is recommended that the assembly instructions are followed.

Torque Figures N/m

| Gland Size | Os | O | A | B | C | C2 | D | E | F |
|------------------|----|----|----|----|----|----|----|----|----|
| Middlenut Torque | 6 | 6 | 8 | 8 | 10 | 15 | 15 | 28 | 35 |
| Backnut Torque | 12 | 12 | 20 | 30 | 35 | 45 | 56 | 60 | 75 |

ATEX/IECEX:

Ex db IIC Gb / Ex eb IIC Gb / Ex nR IIC Gc / Ex tb IIIC Db
 ATEX: CML18ATEX1268X UKEX: CML21UKEX1132X
 IECx: CML 18.0131X

Additional Approvals

EAC: No EA3C RU C-GB.HA91.B.00264/21 Inmetro: IEx 14.0272X
 PESO: P450038

CABLE GLAND SELECTION TABLE

| Size Ref. | Entry Thread Size | | Cable Acceptance Details | | | | | | Max Length | Hexagon Dimensions | |
|-----------|-------------------|-----------|--------------------------|----------|-----------------|-------------------|--------------|-------|------------|--------------------|----------------|
| | | | Metal Clad Sheath | | Cores | | Outer Sheath | | | | |
| | Metric | NPT | Min. Dia | Max. Dia | Max. Over Cores | Max. No. of Cores | Min. | Max. | | Across Flats | Across Corners |
| A | M20 | ½" - ¾" | 0.41" | 0.64" | 0.43" | 15 | 0.49" | 0.81" | 2.94" | 1.18" | 1.28" |
| B | M25 | ¾" - 1" | 0.55" | 0.93" | 0.63" | 30 | 0.67" | 1.02" | 3.24" | 1.42" | 1.56" |
| C | M32 | 1" - 1¼" | 0.85" | 1.23" | 0.86" | 42 | 0.87" | 1.30" | 3.52" | 1.81" | 1.99" |
| C2 | M40 | 1¼" - 1½" | 1.17" | 1.59" | 1.05" | 60 | 1.10" | 1.61" | 3.81" | 2.17" | 2.39" |
| D | M50 | 2" | 1.37" | 1.96" | 1.48" | 80 | 1.42" | 2.07" | 4.77" | 2.56" | 2.79" |
| E | M63 | 2½" | 1.81" | 2.55" | 1.93" | 100 | 1.81" | 2.57" | 4.74" | 3.15" | 3.46" |
| F | M75 | 3" | 2.37" | 2.98" | 2.35" | 120 | 2.24" | 3.07" | 4.94" | 3.74" | 4.09" |

EU Declaration of Conformity in accordance with European Directive 2014/34/EU and UK Statutory Instrument 2016/1107

Manufacturer: Hawke International, Oxford Street West, Ashton-under-Lyne, OL7 0NA, United Kingdom
Equipment: 711
Provisions of the Directive fulfilled by the Equipment: Group II Category 2GD Ex db eb IIC Gb, Ex nR IIC Gc, Ex tb IIIC Db – IP66 67 68 69
Harmonized Standards used: EN 60079-0:2018, EN60079-1:2014, EN60079-7:2015+A1:2018, EN60079-15:2019, EN60079-31:2014
Notified Body for EU-Type Examination: CML B.V. 2776 Amsterdam, NLD
EU-type Examination Certificate: CML18ATEX1268X, CML19ATEX4507X (Ex nR)
Notified Body for production: 0598
Approved Body for UK-Type Examination: CML B.V. 2503 Chester, UK
UK-type Examination Certificate: CML21UKEX1132X, CML21UKEX4133X (Ex nR)
Approved Body for production: 1180

On behalf of the above named company, I declare that on the date the equipment, accompanied by this declaration, is placed on the market the equipment conforms with all technical and regulatory requirements of the above listed directives.

Andrew Reid
 Technical Manager