

PROCESSING KEY POINTS

Introduction via 2-roll mill into compounded EPDM

Equipment

Internal mixer

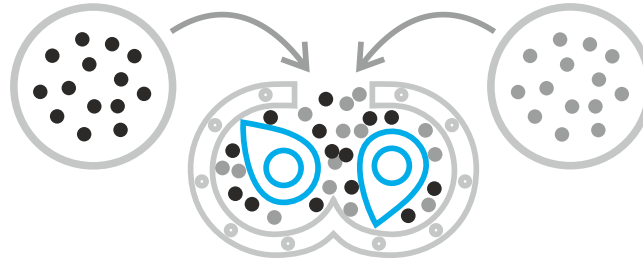
2-roll mill

(Roll diameter – 200 mm, friction – 1:1.1, rolls speed – 22.7:25, roll temperature: 50+5 °C)

Stage 1

COMPOUND PREPARATION
Internal mixer

Required amount of EPDM

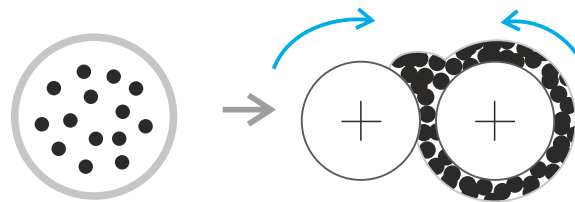


Chemicals except curing agent and TUBALL™ MATRIX

Stage 2

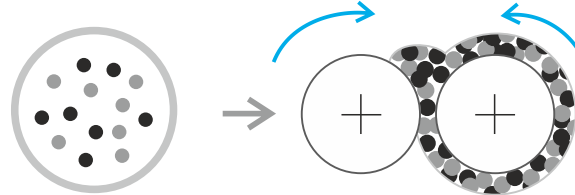
COMPOUNDING WITH TUBALL™ MATRIX
2-roll mill

2.1. EPDM from stage 1



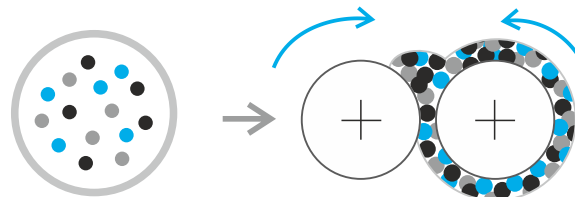
Gap size – 0.5 mm
Mixing time – 2 min

2.2. Add curing agent



Mix until homogeneous
Mixing time – 3 min

2.3. Add TUBALL™ MATRIX 610

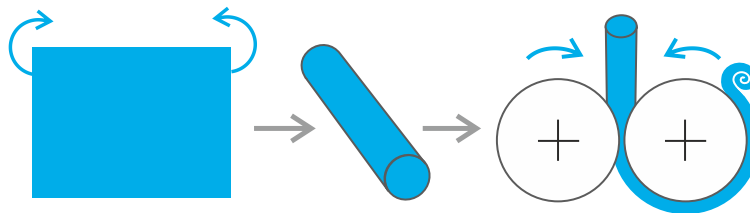


Mix until homogeneous
Mixing time – 5 min
Increase gap to 2 mm

Decrease rolls speed to take off the mixture

Stage 3

"ROLL AND UPEND" MIXING
2-roll mill



Gap size – 0.5 mm
10 cycles
Increase gap to 2–2.5 mm

Continue rolling the compound to reach ~2 mm thickness

Make sheet and conditioning before curing for 1 to 24 hours under normal conditions

Stage 4

CURING

CURING SYSTEM	CURING SAMPLE DIMENSIONS, mm	PRESSURE, kgf/cm ²	TEMPERATURE, °C	TIME, min
Peroxide	145x145x2	200	180	20
Sulfur			160	40

May vary based on your MDR results and formulation

Stage 5

ELECTRICAL RESISTIVITY MEASUREMENT

Surface resistivity – ASTM D 257

Volume resistivity – ASTM D 991