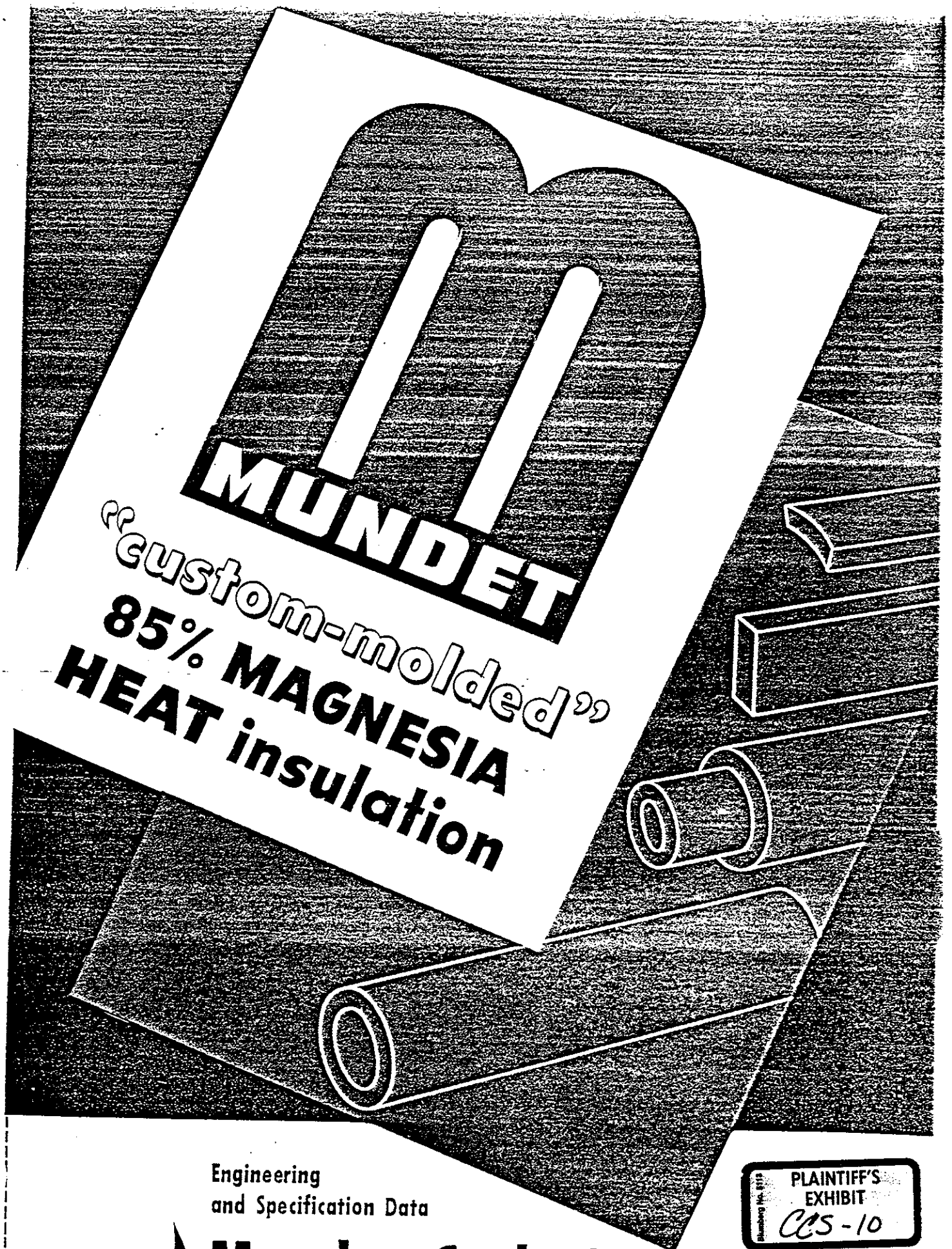


Engineering
and Specification Data

PLAINTIFF'S
EXHIBIT
CCS-10

Mundet Cork Corporation

85% magnesia heat insulation

some of the many advantages

controlled uniformity

Precision manufacture on the latest type of automatic equipment insures uniformity of product in all the important qualities affecting insulating performance as well as that of density to within a tolerance of $\pm\frac{1}{2}$ lb per cubic foot.

thermal conductivity

Following is report of test of Mundet "Custom-Molded" 85% Magnesia pipe covering prepared by United States Testing Company, Inc. Copy of report will be sent on request.

determination of thermal conductivity (k) factor through the mean temperature range 100°F to 500°F

mean temperature °F	thermal conductivity (k) btu/hr/sq ft/°F/in
100	0.338
200	0.363
300	0.408
400	0.454
500	0.500

smooth finish

Mundet "Custom-Molded" 85% Magnesia is molded to exact finished size and thickness; it is not molded oversize and then milled or machined to size. This method produces a smooth finish on the inner and outer surfaces, thus adding to the appearance and effectiveness of the insulation.

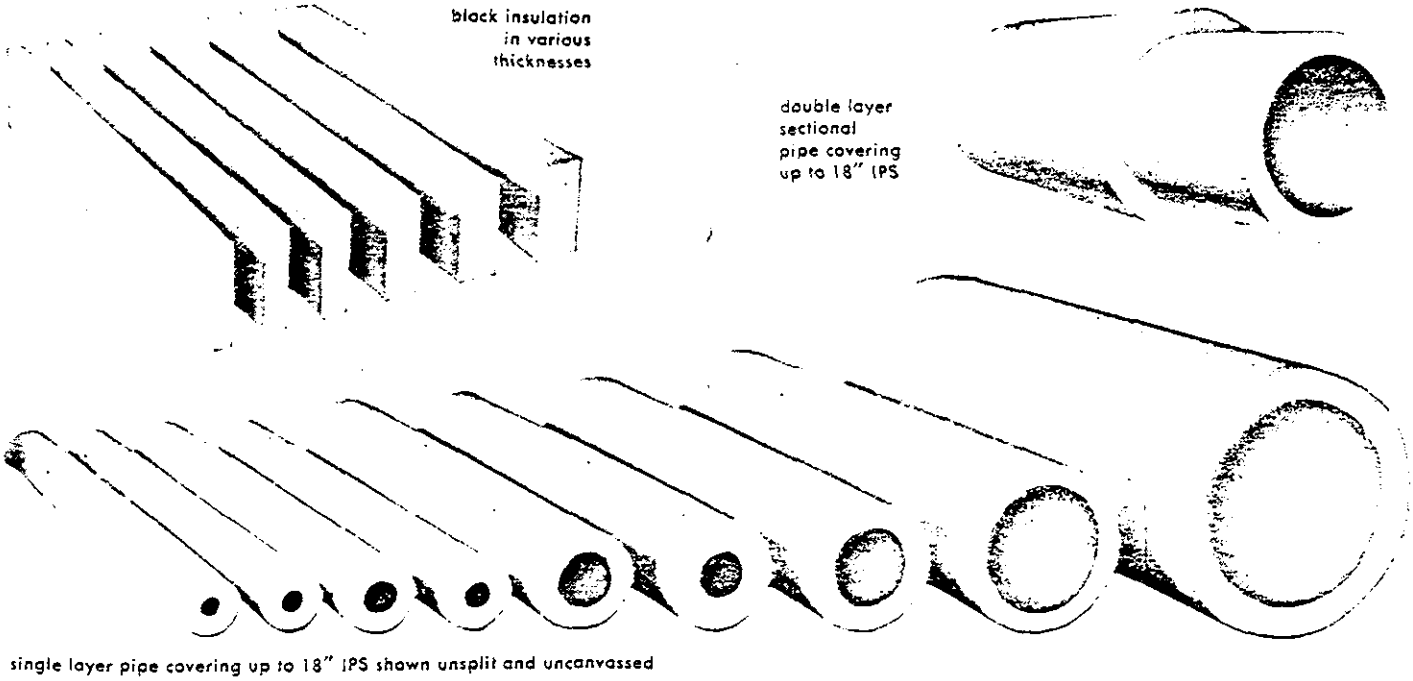
precision pipe fit

Each size and thickness is accurate and identical. No spaces are left for the escape of heat. The whole heated surface is snugly enclosed; longitudinal and end joints butt tightly.

other advantages

Under "physical characteristics" (page 5) other important advantages of Mundet "Custom-Molded" 85% Magnesia are outlined.

Mundet "Custom-Molded" 85% Magnesia pipe covering and blocks



single layer pipe covering up to 18" IPS shown unsplit and uncanvassed

85% magnesia heat insulation

physical characteristics

compressive strength

Compressive strength is psi to produce ⅛" compression in 1½" thick sample 75-85 lbs.

ductile strength

Through the use of long asbestos fibres running longitudinally, greater strength is built into Mundet "Custom-Molded" 85% Magnesia. It exceeds the modulus of rupture requirements of the U.S. Navy Specifications, indicating fully adequate "machine test" strength. It does not "powder," settle or disintegrate even under heavy vibration. It withstands handling and may be removed and reapplied if necessary.

light weight

Mundet 85% Magnesia weighs only 11 lbs per cubic foot = ½ lb. Its light weight makes even the larger sizes and thicknesses easy for one man to handle, thus simplifying and speeding up application.

easy to apply

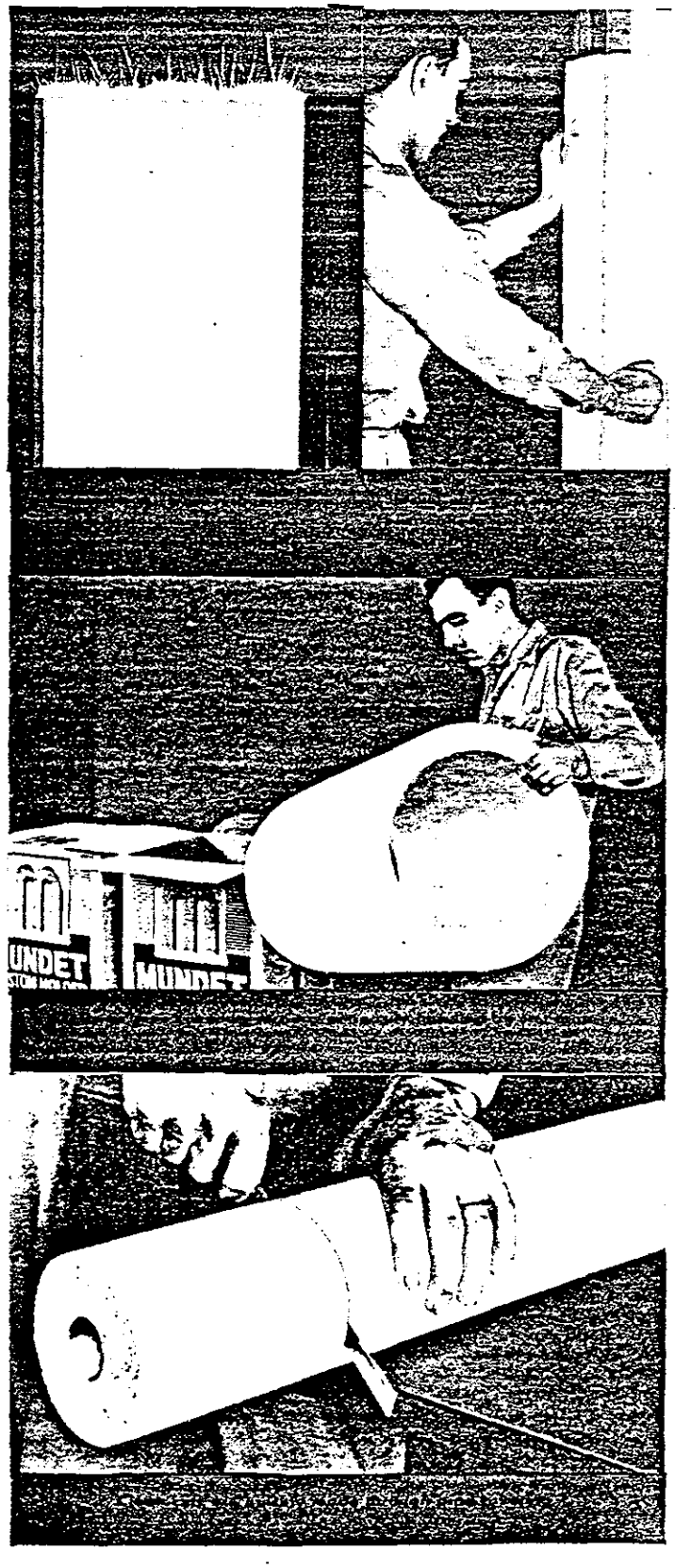
It cuts easily and cleanly, even without canvas support. No chipping or crumbling. Blocks score clean, easily, thus reducing time necessary for application.

minimum shrinkage

Steam or water leakage does not affect the structural characteristics. (Linear shrinkage — 24 hr soaking period at maximum useable temperature 1-2%; volume shrinkage — 24 hr soaking period at maximum useable temperature 3-6%.)

guarantee

The Company unqualifiedly guarantees that its material and workmanship are of the best and agrees to make good, without cost to the customer, any defect that may be chargeable to inferior material or workmanship as indicated in its contract form.



85% magnesia heat insulation

Mundet "Custom-Molded" 85% Magnesia segmental pipe covering

Mundet segmental pipe covering can be furnished in all conventional sizes, thicknesses or types, including double layer (double standard) and curved radius blocks. The segmental pipe covering is molded in segmental form to a predetermined standard radius. Only the edges are milled so that the segments will conform precisely to the required diameter. The inner and outer surfaces are left with their original smooth molded facing. These are designed for pipe covering applications where sectional (2-piece) pipe covering cannot be used due to size limits.

All pipe sizes larger than 18 inches, and all other pipe sizes not listed on page 6 are furnished in segmental form.

The following table shows the number of segments per section of pipe covering for all thicknesses of segmental pipe covering.

nominal pipe sizes inches	number of segments	nominal pipe sizes inches	number of segments
19	10	24	12
20	10	26	13
21	11	27	14
22	11	28	14
23	12	30	15

Mundet 85% magnesia cement

Mundet 85% magnesia cement is used for filling joints and cracks in 85% magnesia pipe covering and blocks. It is a highly efficient insulating cement, recommended for temperatures up to 600°F. It is not recommended for hard finishes.

This cement is mixed with water to the proper consistency, and usually applied in layers of ¼ in thickness over 85% magnesia blocks where the insulated areas are to be finished with canvas or mastic.

The conductivity of Mundet 85% magnesia cement averages approximately 10% higher than this material in molded form due to the cement being of higher density upon application.



rurnished in 50 lb. 3 ply paper bags.
Covering capacity: approximately 50 sq ft, 1 inch thick, per bag.