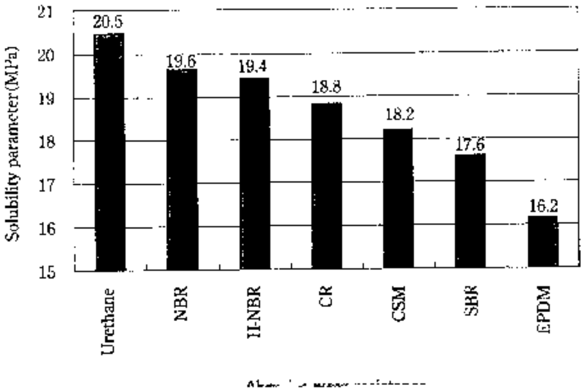
KAWASAKI STEEL TECHNICAL REPORT No. 45 November 2001

Improvement of Rubber Toughness by Cross-linking Effect and Techniques for Extending Service Life of Rubber Rolls in Steel Production Processes*

Synopsis:

For this reason, development of rubber materials was carried out to realize improved performance from the [illegible]

Table 1 Effective factor to improve rubber properties



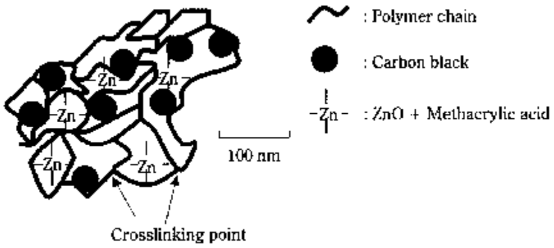


Fig. 2 Microstructure of developed rubber

improvement in abrasive wear resistance by the formation of a high order structure is expected

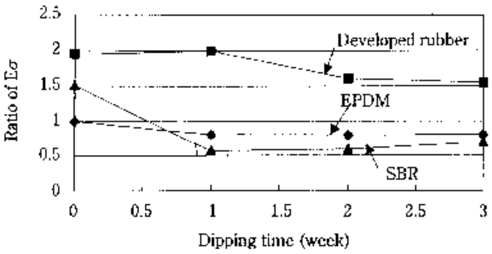


Fig. 4 Change of the ratio of Eσ during dipping experiments

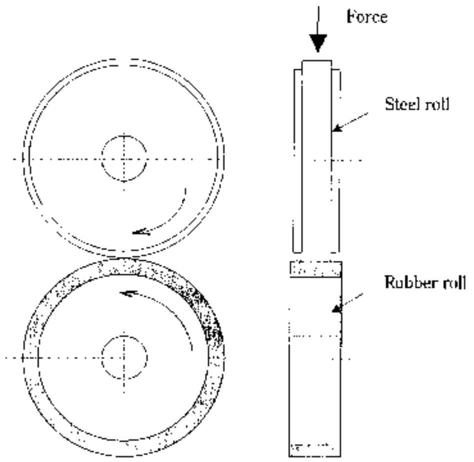
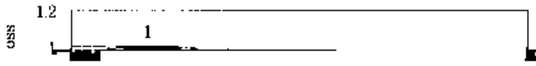


Fig. 5 Schematic diagram of abrasive wear test

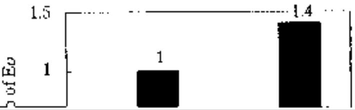
mately 1.9 times and SBR approximately 1.5 times that of EPDM. Thus, the developed rubber has a value approximately 1.3 times that of SBR, and therefore can be expected to provide abrasive wear resistance superior to that of SBR.

2.4 Performance Evaluation in Laboratory Tests



2.5 Total Evaluation in Production Equipment

From the laboratory tests described thus far, it can be



tal scale rolls were trial manufactured with an outer [illegible]

diameter of 1255 [illegible]

a large number of [illegible]