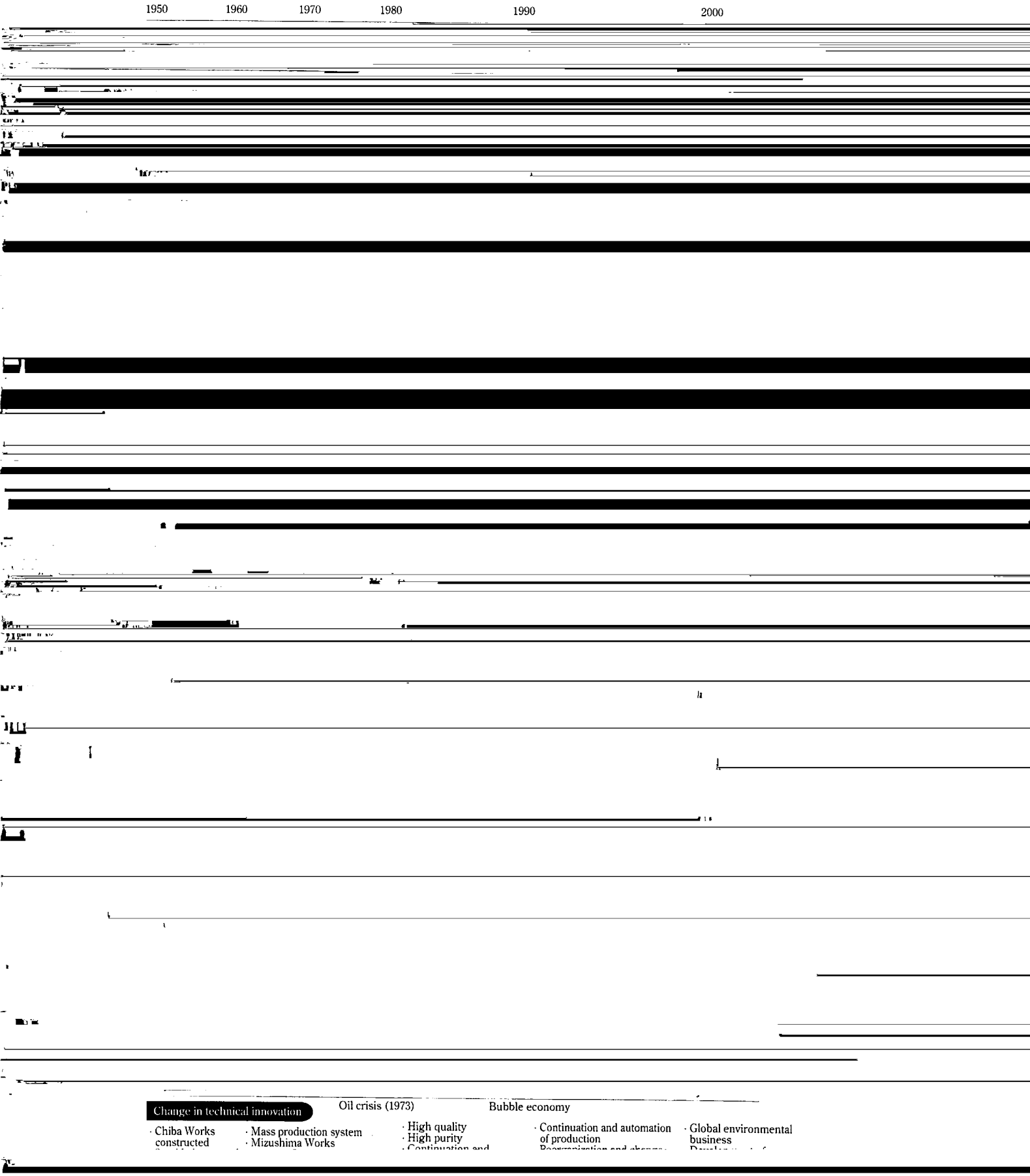
KAWASAKI STEEL TECHNICAL REPORT No. 44 June 2001

Research and Development Creating the Future of Steel*

Synopsis:

Strong attitude for Research and Development, a system for Research and Development, and the history of research laboratories in Kawasaki Steel are described


1950
1960
1970
1980
1990
2000
Change in technical innovation
Oil crisis (1973)
Bubble economy
· Chiba Works constructed
· Mass production system
· Mizushima Works
· High quality
· High purity
· Continuation and automation of production
· Global environmental business

Corporate Planning Dept. : Management of policy and planning

Product Business Unit

Product Business Planning Dept. : Product strategy/Profit planning/Technical marketing

Sales Dept. (Sale)

Steel Works (Production)

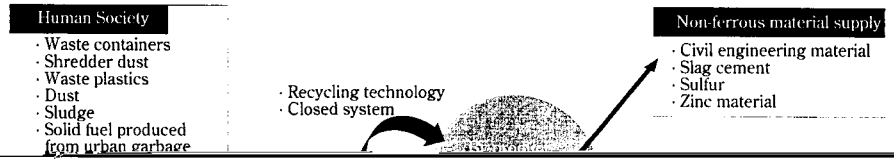
[redacted]

[redacted]

· Pb free steel sheet for fuel tanks

· Ultra high *r*-value cold rolled steel sheet

[redacted]


Human Society
· Waste containers
· Shredder dust
· Waste plastics
· Dust
· Sludge
· Solid fuel produced from urban garbage
· Recycling technology
· Closed system
Non-ferrous material supply
· Civil engineering material
· Slag cement
· Sulfur
· Zinc material

production technology for high purity solar-grade silicon for use in solar cells based on metallurgical treatment processes.[23] In the field of measurement and control technologies, the company has developed a flaw detec-

Steel intends to maintain a stance that attaches great importance to research and development in the future, as it has in the past.

orescence method,[24] a technology for evaluating the properties of electrical steel sheets for use in motor cores,[25] and other technologies, contributing to process control not only in iron and steel processes, but also in other fields of industry. In the field of analysis, the company has developed a high accuracy analysis method for the oxygen content of steel by optical emission spectroscopy, making it possible to obtain the distribution

1) "Kawasaki-Seitetsu 25-nenshi", (1976)
2) M. Kondou: "Kenkyuu-Kaihatsu Management Kenkyu-ushitsu-Houmon-Series VISIT78 Kawasaki-Seitetsu Gijutsu-Kenkyuusho", **8**(1998)10, 96
3) A. Tosaka, T. Hira, and O. Furukimi: *Kawasaki Steel Giho*, **32**(2000)1, 7
4) A. Miyazaki, J. Hirasawa, and S. Satoh: *Kawasaki Steel Giho*, **32**(2000)1, 32
5) Kawasaki Steel Technical Res. Labs. Ed.: "*Kenzai-You Stain-*