### WELCOME TO EONMETALL

Eonmetall was incorporated in Malaysia and is a Main Market public listed Company in the Malaysia Bourse.

The principle activities of Eonmetall are in the manufacturing of world class metalwork and industrial process machinery and equipment, globally accepted high qualify flat steel products as well as the easy to assemble and quality assured steel storage system.

Solely, understanding manufacturing needs is not always enough to guarantee an edge over our customers' business requirements, Eonmetall pushes beyond traditional boundaries and works across disciplines. We have firm commitment in providing IT Solutions to complement our customers' needs.

Eonmetall's consistent philosophy of uncompromising quality has gained recognition as the leading manufacturer and design innovator of metalwork machinery and equipment. We are also the patent owner of Palm Fibre Oil Extraction (PFOE) and Palm Kernel Oil Extraction (PKOE), deploying the solvent extraction technology to extract oil from mesocarp palm fibre and palm kernel cake. We have grown steadily over the years and simultaneously built up an extensive distribution network of established customers and markets.

Eonmetall products are globally accepted with market penetration in Asia, Asia Pacific, Africa, Middle East, Europe and America. Eonmetall gives its customers a Total Solution in advance design, reliable engineering, world class manufacturing and cost effective Project Management.









# EONMETALL GROUP BERHAD

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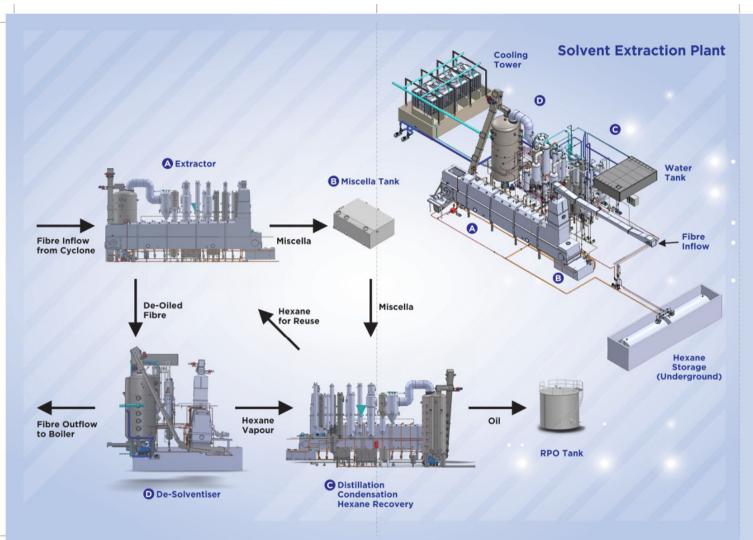




# TECHNOLOGICAL ADVANCEMENT

PALM FIBRE OIL EXTRACTION (PFOE)
PALM KERNEL OIL EXTRACTION (PKOE)





## THE TECHNOLOGY

#### INTRODUCTION

Palm Fibre Oil Extraction (PFOE) Plant, a plant designed and equipped to extract the residual oil from palm mesocarp fibre by mean of solvent; a food grade hexane is used to extract the remaining 5-7% of residual crude palm oil (CPO) available in palm mesocarp fibre, thereby enhancing oil extraction rate (OER) by 0.5%.

Palm Kernel Oil Extraction (PKOE) Plant is designed to extract the oil from kernel cake by means of solvent. This shall extract an additional 3-5% PKO.

#### Simple, Robust, User Friendly and Flexible

Our proven solvent extraction plant design is simple, robust, user friendly and flexible with in-built safety features. Such simplicity in operation is attained with automation whereby synchronisation of multiple processing steps and safety interlocking system in the extraction plant are closely monitored and supervised.

#### Safety and Low Hexane Consumption

Hexane is a highly volatile and inflammable solvent used in the extraction process of world vegieoils either edible or non-edible. Much efforts and close attention to every single detail have been focused on in the plant design for safety consideration. Moreover, our designed mechanical seals on moving parts ensure no leakages of the hexane. Cooling areas in vapour condensors are also specially designed to achieve maximum condensation for hexane recovery and minimum lost of hexane vapour through venting. All these measures make the PFOE/PKOE work with lowest hexane consumption.

#### Low Power and Steam Consumption

Excellent synchronising of various processing steps coupled with the fact that many heat saving devices are incorporated in a PFOE/PKOE plant ensures lowest steam and power consumption per tonne of raw material processed. With highest in-built capacity, lowest utility consumption of steam and power, lowest residual oil in deciled fibre/cake and lowest hexane consumption, PFOE/PKOE is a sure way to success in this competitive world.

#### Short Turnkey Delivery

The construction of each turnkey plant takes 6-8 months.

#### ROI

Fast Return on Investment of 2-4 years (subject to mill capacity and market oil price).

Raw Material	Palm Fibre, Max of 10% Oil Content & 40% Moisture
	Palm Kernel Cake, Max of 18% Oil Content
Mill Capacity	45/60/90/120 Ton FFB/Hour
KCP Capacity	200/300/400/600/1000 Ton Kernel/Day
Final Oil Left in De-oiled	1% (Fibre), 1.5% (Kernel Cake)
Hexane Consumption	2-3 Litres/Ton Fibre or Kernel Cake
Power Consumption	170 - 250 KWh (Depending on Mill/KCP Capacity)
Steam Consumption	4 - 7 Ton/Hour (Depending on Mill/KCP Capacity)
Manpower	3 persons/shift
Land Area	1600M <sup>2</sup>
Water Consumption	1-2 Tons per Hour