CHEMSTA®

山东凯斯达机械制造有限公司 Shandong ChemSta Machinery Manufacturing Co.,Ltd.

济宁市机械设计研究院 Jining Machinery Design and Research Institute





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专业设计建造

植物油脂工程 植物蛋白工程

天然色素提取工程

无害化处理工程

压力容器(GB/ASME)

PROFESSIONAL DESIGN & FABRICATION

烘干设备

Vegetable Oils&Fats Project

Vegetable Protein Project

Natural Pigment Extraction Project

Harmless Treatment of Livestock

Drying Machine

Pressure Vessel(GB/ASME)





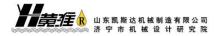














作为国家级高新技术企业,山东凯斯达机械制造有限公司、济宁市机械设计研究院在企业品牌、企业管理、企业形象等方面取得了长足的发展。抚今追昔,我们的发展来之不易,饮水思源,感谢社会各界的鼎立支持。

山东凯斯达秉承四十余年的油脂工程经验。立足以技术创新谋发展。以提供高端、高质、高效的产品求生存。依托企业的专业人才优势。不断优化、提升油脂、蛋白工程在节能工艺及智能控制技术水平。全面推行了"TPS"、"QCC"、"6S"管理体系。工程的内外在质量、产品的主要经济技术指标一直名列行业前茅、从而赢得了市场的认可和客户的信任。

做更好的产品——为社会、为客户、为自己,我们一直在践行。我们愿与国内外朋友们携手共创美好的明天!

As national high-tech company, Shandong ChemSta Machinery Manufacturing Co.,Ltd /Jining Machinery Design and Research Institute has made great progress in company brand, management and image fields. We are grateful for the support from all sections of the society.

Shandong ChemSta inherits more than 40 years of oils & fats engineering experiences, seeks for development based on technology innovation, and survives on providing high-end, high-quality, and high efficient products. Company professional engineers constantly optimize and promote energy-saving technology and intelligent control technology of oils & fats and protein projects. "TPS" "QCC" "6S"management systems are fully performed in company. Internal and external engineering quality, and products' main economic & technical indicators are always ranked industry forefront. Thus, ChemSta wins market recognition and customer trust.

ChemSta is always striving to make better products---for society, for customer, and for ourselves. We would like to join hands with friends at home and abroad to create a better future.

以心相交,成其久远!
INTERSECTION WITH HEART,
INTO ITS LONG! >>>>

企业简介 CHEMSTA DESCRIPTION >>>>



山东凯斯达机械制造有限公司是济宁市机械设计研究院 投资控股的, 集研发, 设计, 生产制造, 工程服务于一体的 高新技术企业。

专业从事植物油脂制取与精炼成套设备、大豆低温豆 粕、植物蛋白(大豆浓缩蛋白、分离蛋白、棉籽蛋白等)成 套设备, 天然产物萃取分提成套设备, 大型回转干燥设备, 化工压力容器 (GB/ASME) 设备的设计制造、工业厂房建 筑设计、电气自动化控制系统、通用机械设备的研发、生产 制造及工程安装。

拥有工程设计、压力容器 (A2) 和压力管道设计、制 告. 安装. 以及ASME (美标) 压力容器设计制告许可等 资质 通过了ISO9001质量管理体系认证及法国国际检验局 (BV)的认证。荣获国家级"国家级高新技术企业"、"全 国守合同重信用企业""济宁市十大创新企业" 植物蛋 白制取技术"优秀创新团队"等多项荣誉称号 企业先后被 认定为"山东省粮油加工设备工程技术研究中心"、"省级 企业技术中心"。

<u>酿法大豆浓缩蛋白成套装备经中国粮油学会专家组评</u> 定为"整体水平达到国际领先" "4万吨/年智能控制浓缩 蛋白技术装备" 荣获山东省技术创新项目 "3万吨/年醇法 制备大豆浓缩蛋白成套技术装备" 荣获山东省重点领域首台 (套) 技术装备 "节能型低温粕生产技术及智能化装备" 荣获山东省科学技术进步一等奖 "800t/d低温浸出工艺成 套设备"荣获山东省科技讲步一等奖 "600t/D 油脂精炼 智能控制技术装备"荣获山东省技术创新奖"。















Shandong ChemSta Machinery Manufacturing Co., Ltd., is a professional scientific research organization and National Hi-tech company of scientific research, production, sales and service: a holding company belongs to Jining Machinery Design & Research Institute.

ChemSta engages in the research & design, manufacturing and installation of vegetable oils & fats production and refinery process and complete set of equipment, low temperature soybean meal and vegetable protein (soybean protein concentrate, soybean protein isolate, cotton seed protein, etc.) process and complete set of equipment, natural products extraction and purification process and complete set of equipment, large-scale rotary drum dryers, chemical pressure vessels (GB/ASME), industrial & civil building. electric auto-control and general mechanical equipment.

ChemSta obtains project design qualification, pressure vessel (A2) and pressure piping design, manufacturing installation licenses, holds ASME certificate, and passes ISO9001 quality management system certification and Bureau Veritas (BV) certificate. Our company is recognized as National Hi-tech Enterprise, National Observing Contract and Valuing Credit Enterprise, Jining Ten Innovative Enterprise, Outstanding Innovation Team (for vegetable protein project) and so on. And we are named as Shandong Province Cereals & Oils Processing Equipment Engineering Technology Research Centre and .Provincial Enterprise Technology Center.

"The complete set of equipment for soybean protein concentrate(alcohol) has been evaluated by the expert group of CCOA reaching the international leading position" "40000t/a intelligent control protein concentrate technical equipment" won the Shandong Province technological innovation project, "30000t/ a complete set of technical equipment for alcohol method sovbean protein concentrate" won the first (set) technical equipment in key fields of Shandong Province. "energy-saving type low-temperature meal production technology and intelligent equipment" won the first prize of scientific and technological progress of Shandong Province. "800t/d complete set of low-temperature extraction process equipment" won the first prize of scientific and technological progress of Shandong Province, and "600t/d intelligent control technology and equipment for oil refining" won the technological innovation award of Shandong Province













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创新 发展



凯斯达工业园位于济宁市国家高新技术开发区 占地6.6万平方米,集研发、设计、制造、装配功能一 体 是目前国内规模最大的油脂化工装备生产基地之

ChemSta is located in national high-tech zone of Jining city, covers 66,000 square meters, integrates research, design, fabrication and assembly, and it is one of the biggest oils & fats chemical equipment production sites in China.

花园式工业园

Garden-style Industrial Park





和谐 共赢 HARMONY WIN-WIN













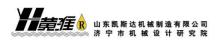






加公

INTERSECTION



创新 发展 INNOVATION

和谐 共赢 HARMONY WIN-WIN

装备精良 品质保障

Well Equipped Quality Guaranteed

















精细管理 以人为本

Elaborate Management People-oriented















提供服务 PROVIDE SERVICE

植物蛋白工程 Vegetable Protein Project

》100-1000t/d大豆低温粕生产线成套设备

100-1000t/d Low-temperature Soybean Meal Production Line and Complete Set of Equipment

》3000-120000t/a醇法浓缩蛋白(SPC)制取及改性生产线成套设备

3000-120000t/a SPC Production Line (alcohol)and Complete Set of Equipment

》3000-20000t/a大豆分离蛋白(SPI) 生产线成套设备

3000-20000t/a SPI Production Line and Complete Set of Equipment

》50-500t/d全脂大豆蛋白粉生产线成套设备

50-500t/d Full Fat Soybean Protein Powder Production Line and Complete Set of Equipment

》100-1000r/d棉籽蛋白生产线成套设备

100-1000t/d Cottonseed Protein Production Line and Complete Set of Equipment

油脂工程 Oils & Fats Project

》100-6000r/d植物油料预处理、预榨生产线成套设备

100-6000t/d Vegetable Oil Pretreatment and Pressing Production Line and Complete Set of Equipment

》100-2000t/d花生、葵花籽等压榨-级油生产线成套设备

100-2000t/d First-grade Oil (peanut, sunflower-seed, etc) Pressing Production Line and Complete Set of Equipment

》100-6000r/d植物油料浸出生产线成套设备

100-6000t/d Vegetable Oil Extraction Production Line and Complete Set of Equipment

》50-1000t/d植物油脂精炼生产线成套设备

50-1000t/d Vegetable Oil Refinery Production Line and Complete Set of Equipment

》混合油精炼工艺成套设备

Miscella Refinery Process and Complete Set of Equipment

》磷脂干燥浓缩生产线成套设备

Phospholipid Concentrate and Drying Production Line and Complete Set of Equipment

动物无害化处理生产线成套设备

Harmless Treatment of Livestock Production Line and Complete Set of Equipment

天然植物色素 (辣椒红、菊花黄素等) 提取、分提生产线成套设备

Natural Plant Pigment (capsanthin, Chrysanthemum flavin, etc) Extraction and Fractionation Production Line and Complete Set of Equipment

大豆糖浆提取异黄酮、低聚糖加工工艺及成套设备

Isoflavone and Oligosaccharide Extraction Process and Complete Set of Equipment

工厂自动化控制系统 (西门子PLC+WINCC)

Factory Auto-control System (SIEMENS PLC+WINCC)

大型滚筒回转干燥机、生物质烘干设备

Large-scale Rotary Drum Dryer/Biomass Dryer

水处理厂污泥脱水机、烘干机

Sludge Dewatering/Drying Machine (water treatment plant)

美标 (ASME) 压力容器、高压换热器、LNG储罐

ASME Pressure Vessel/High Pressure Heat Exchanger/LNG Storage Tank

一、二、三类压力容器 (GB)、非标化工设备设计、制造

Design and Manufacture of Class I.II.III Pressure Vessel (GB)/Non-standard Chemical Equipment

整套工程的规划、设计、制造、安装调试交钥匙工程

Plan, design, manufacture, installation, commissioning, turnkey project

植物蛋白工程及装备 VEGETABLE PROTEIN PROJECT AND EQUIPMENT

低温豆粕生产线成套装备及工程

>>> Low-temperature Soybean Meal Production Line and Complete Set of Equipment

原料

大豆

产品

低温豆粕、大豆油

用途

低温豆粕作为加工大豆植物蛋白的原料(蛋白质含量 53%以上 脂肪含量小干0.5%)

工艺特点

大豆经清理、分级、脱皮、低温处理、脱脂、低温脱溶、真空低温干燥等工段加工后。分别得到大豆油和低温豆粕(NSI值大干85%)。





RAW MATERIAL

Soybean

PRODUCT

Soybean white flake soybean oil.

PURPOSE

Soybean white flake (protein content>53% fat content <0.5%) as raw material for processing soybean protein.

PROCESS FEATURES

Soybean oil and soybean white flake (NSI value>80%) are respectively produced after the soybean through cleaning, grading, de-hulling, low-temp treatment, de-fatting, low-temp desolventizing and vacuum low-temp drying, etc.









植物蛋白工程及装备 VEGETABLE PROTEIN PROJECT AND EQUIPMENT

连续醇洗法功能性浓缩蛋白成套装备及工程

Soybean Protein Concentrate (SPC) Continuous Production Line (alcohol) and Complete Set of Equipment

原料

高蛋白大豆粕

食品级(或饲料级)低变性大豆浓缩蛋白、大豆糖浆

食品级:食品(面食、肉制品等)添加剂、保健品原料 (蛋白质含量70%以上)

饲料级:特别适用于乳猪、水产、犊牛、宠物的饲料添 加剂

エ芝特点 📗

利用食用乙醇将豆粕中的水溶性成分物质(主要为糖 类等) 萃取分离 再经脱溶 粉碎 烘干 超微粉碎后得 到大豆浓缩蛋白。无水、空气污染 节能环保 未来大豆 蛋白制取主导方向。







RAW MATERIAL

High protein soybean meal

PRODUCT

Food grade (or feed grade) SPC and soybean syrup

Food grade: food (pasta, meat products, etc) additives, health product raw materials (protein content>70%).

Feed grade: especially suitable for the feed additives of suckling pig, aquatic product, calf and pet

PROCESS FEATURES

Alcohol leach soybean protein concentrate is produced by using edible alcohol to extract and separate water soluble substance from low-temp meal (mainly is sugar, etc), then extrusion crushing, drying and superfine crushing. This production process has no water and air pollution, saving energy and protecting environment, and it is the predominant orientation of producing soybean protein in



大豆分离蛋白(SPI)生产线成套装备及工程

Soybean Protein Isolate (SPI) Production Line and Complete Set of Equipment

植物蛋白工程及装备 VEGETABLE PROTEIN PROJECT AND EQUIPMENT

原料

大豆低温豆粕

大豆分离蛋白 、大豆膳食纤维

食品添加剂、保健品原料(蛋白质含量90%以上)

工芝特点

利用碱溶, 酸沉工艺将低温豆粕中的纤维与蛋白分离 出来,蛋白质经高压均质、高温灭菌、喷雾干燥后得到大 豆分离蛋白。



RAW MATERIAL

Soybean white flake

PRODUCT

SPI and soybean dietary fiber

PURPOSE

Food additives, health product raw materials (protein content>90%).

PROCESS FEATURES

This process uses alkali soluble and acid precipitation process to isolate fiber and protein from soybean white flake. Protein through homogenizing, high temperature sterilizing, spray drying to produce SPI.













油脂工程及装备 OILS & FATS PROJECT AND EQUIPMENT

植物油料预处理、压榨成套装备及工程

>>> Vegetable Oil Pretreatment and Pressing Project and Complete Set of Equipment

原料

大豆、花生、菜籽、葵花籽、玉米胚芽、米糠、 棉籽、棕榈果(仁)等

产品

食用油脂, 高温粕

工艺特点 📗

根据不同油料采用不同的前处理。压榨。膨化、浸出 工艺,获得高品质粕和食用油脂的机械化、连续流水线、 可实现全电脑自动控制的工艺生产过程。

RAW MATERIAL

Soybean, peanut, canola, sunflower seed, corn germ, rice bran, cottonseed, palm fruit (kernel), etc.

PRODUCT

Edible oil, high temperature meal

PROCESS FEATURES

According to different oils, different pretreatment, pressing, extrusion and extraction processes are adopted to obtain high-quality meal and edible oil by mechanization, continuous production line and fully computer-controlled process



油脂工程及装备 OILS & FATS PROJECT AND EOUIPMENT

植物油料浸出成套装备及工程

>>> Vegetable Oil Extraction Project and Complete Set of Equipment

大豆、花生、菜籽、葵花籽、玉米胚芽、米糠、 棉籽, 棕榈纤维(&饼)等

产品

毛油、粕

主要设备

浸出器 DTDC脱溶烘干机 负压蒸发器 卧式不锈钢 列管冷凝器、混合油过滤去除粕沫系统、尾气回收溶剂系 统, 溶剂分水循环系统, 电气控制系统等。

RAW MATERIAL

Soybean, peanut, canola, sunflower seed, corn germ, rice bran, cottonseed, palm fiber (& cake), etc.

PRODUCT

Crude oil, meal

MAIN EQUIPMENT

Extractor, DTDC, negative pressure evaporator, horizontal stainless steel tube condenser, miscella filtration and foam removal system, solvent recovery system in tail gas, solvent-water separation circulation system, electrical control system, etc.













油脂工程及装备 OILS & FATS PROJECT AND EQUIPMENT

天然产物提取成套装备及工程

植物油脂精炼成套装备及工程

>>> Vegetable Oil Refinery Project and Complete Set of Equipment

原料

大豆油、花生油、菜籽油、棉籽油、葵花籽油、 玉米胚芽油、稻米油、棕榈油等

主要设备

毛油过滤、水化脱胶、中和脱酸、脱水干燥、脱 色、脱臭、脱蜡、脱脂、磷脂干燥浓缩设备、全电脑自动 控制系统等。

工艺特点 📗

可有效去除塑化剂, 有效抑制反式脂肪酸的形成, 节能、环保。

RAW MATERIAL

Soybean oil, peanut oil, canola oil, cottonseed oil, sunflower seed oil, corn germ oil, rice oil, palm oil, etc.

MAIN EQUIPMENT

Crude oil filtration, hydration degumming, neutralization deacidification, dehydration and drying, decolorization, deodorization, dewaxing, degreasing, phospholipid drying and concentration equipment, full computer automatic control system, etc.

PROCESS FEATURES

It can effectively remove plasticizer, inhibit the formation of trans fatty acid, save energy and protect environment.













天然产物提取成套装备及工程

Natural Product Extraction Production Line and Complete Set of Equipment

主要从事天然色素、天然精油、天然油树脂、天然营养及药用提取物等产品的技术研发及成套装备的设计、制造、安装 调试交钥匙工程。产品可广泛应用于食品、药品、调味品、化妆品、保健品等领域。

ChemSta engages in the technology R & D of products such as natural pigment, natural essential oil, natural oleoresin, natural nutrition and medicinal extract, as well as in the design, fabrication, installation and commissioning turn-key project of related complete set of equipment. Our products can be widely used in food, medicine, condiments, cosmetics, health products, etc areas.



◆ 参数采集及控制等功能均由控制站内部编程完成:操作站仅完成操作、参 数显示、数据记录、存储等功能。

采用当今工业自动化主流控制之一的西门子PLC控制系统 由操作

站、控制站和通信网络组成的高效、稳定、先进的DCS控制系统。其中

控制站采用高速大容量的S7-1500 PLC. 操作站采用大屏液晶显示器. 监 控软件选用WINCC7.5工控软件,网络采用PROFIBUS现场总线网络。

Using Siemens PLC control system and efficient, stable, advanced DCS

control system(includes: operation station+control station+communication

network). Control station uses high-speed, large capacity S7-1500 PLC;

operation station adopts large size LCD (liquid-crystal display); monitoring

过程控制系统 PROCESS CONTROL SYSTEM

◆ 对重要的参数实现自动控制、数据储存并设定超限报警。

station chooses WINCC7.5 software: network uses PROFIBUS.

◆ 人性化报表打印功能。

主要特点:

- ◆ 可靠性、稳定性、抗干扰能力强。
- ◆ 人机界面友好, 使用方便。
- ◆ 通讯采用PROFIBUS现场总线 通讯快速 可靠。

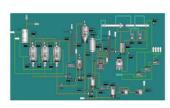
◆ 整套生产线按丁艺流程动态地在电脑上显示。

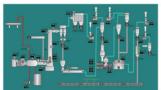
◆ 在电脑上控制电机、电器设备的起、停并提供报警。

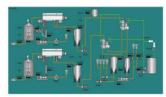
- ◆ 提供开放的ODBC、OLE标准接口 方便与上位机管理系统及其它控制系统 连接并诵讯。
- ◆ 可实现远程监控及故障诊断。

MAIN CHARACTERS:

- Whole process is dynamically displayed on the computer.
- Motor/electrical equipment on-off is controlled and alarm is provided by computer;
- Parameters acquisition and control functions are performed by control station internal programming; operation station only completes operation, parameter display, data record, storage, etc functions.
- Important parameters auto-control, data storage; setting transfinite alarm.
- Humanized report forms printing function.
- Good reliability, stability and antijamming capability.
- Friendly human-computer interface; easy operation.
- Using PROFIBUS, communication is fast and reliable.
- ◆ Providing open ODBC, OLE standard interface to connect and communicate with other control systems.
- · Remote monitoring and fault diagnosis











干燥 设备 DRYING MACHINE

大型滚筒回转干燥机

>> LARGE-SCALE ROTARY DRUM DRYER

产品特点

工作温度低 安全系数高 物料不易燃 采用热风和蒸汽相结合的烘干方式 水份蒸发量大 采用风运、简体倾斜和简体内大螺旋三方面结合的物 料运输方式 物料在设备内流动性好

适应物料 📗

- (1) 生物质燃料:纤维状树皮、锯末、竹屑、木制削 片、刨花、大麦秸秆、燕麦秸秆、小麦秸秆、黑麦秸秆、 稻草、高梁秸秆、玉米秸秆、豆类茎秆、动物粪便等
- (2) 化工、矿山、冶金等行业大颗粒、比重大物料干 燥 如: 矿山, 高炉矿渣, 煤炭, 金属粉末, 磷肥等
 - (3) 粮食工业: 酒糟, 胚芽, 淀粉, 大豆, 豆渣等

热风/烟道废气/中低压蒸汽





Product Features

Low working temperature, high safety coefficient, nonflammable drying material.

Hot air drying combines with steam drying, large moisture evaporation.

Deliver drying material through pneumatic transport. drum incline and internal major spiral; good flowability.

Available Raw Materials

- (1)Biomass: fibrous bark, saw powder, bamboo chippings, wood shavings, barley straw, oat straw, wheat straw, rye straw, rice straw, sorghum straw, maize straw, bean stalk, animal faeces, etc.
- (2)Large particles and high specific gravity material in chemical, mine, metallurgy industries, such as mine, blast furnace slag, coal, metal powder, phosphatic fertilizer, etc.
- (3) Grain processing: vinasse, germ, starch, soybean, soybean dregs, etc.

Heat Source

Hot Wind/Flue Gas/Medium or Low Pressure Steam





干燥 设备 DRYING MACHINE

卧式圆盘干燥机

>> HORIZONTAL TYPE DRYER

产品特点

间接式干燥, 氧气浓度低, 废气少 单台设备蒸发面积大, 占地面积小 转速低,温和处理,磨损和破碎最小化

适应物料 📗

环保行业: 污泥(含水率<85%) 食品行业: 植物蛋白粉 动物蛋白粉

热源

中低压蒸汽/导热油

Product Features

Indirect drying, low oxygen concentration, little flue gas Large evaporation area, small floor space. Low revolving speed, minimum wear and breakage.

Available Raw Materials

Environmental Protection Industry: Sludge(Moisture<85%) Food Industry: Plant Protein Animal Protein.

Heat Source

Medium or Low Pressure Steam/Conduction Oil



压力容器制造专家 PRESSURE VESSEL FABRICATION EXPERT

ASME 压力容器

>> ASME PRESSURE VESSEL















无害化处理设备 HARMLESS TREATMENT OF LIVESTOCK

技术简介:

为有效预防 控制动物传染病的传播和扩散 必须要对病死的禽畜及其产品进行严格的无害化处理。目前 畜禽无害化 处理的方式主要是焚烧、填埋、高温发酵、对环境污染较大。我公司经过多年潜心钻研、改造创新、开发出了新型的畜禽无 害化处理工艺及成套设备 将病死畜禽经过高温、高压干法化制灭菌。脱去脂肪和水,干燥压榨后固体残渣做成有机肥,压 榨出的油脂用作化工或生物柴油原料。变废为宝。这一工艺从根本上解决了病死畜禽无害化处理的难题。

TECHNOLOGY INTRODUCTION:

For effective prevention and control of animal diseases spread and diffusion, the dead livestock & poultry and its products have to be strictly disposed .Currently, the main livestock and poultry disposal way--Burning&Burying&High Temperature Fermentation,has bought serious pollution to the environment. Through years of study and innovation, our company develops a new type of livestock and poultry disposal technology and complete sets of equipment. Removing fat and water by the high-temperature, high-pressure dry boiling and sterilization system, the solid residue can be dried and squeezed into organic fertilizer, and squeezed oil can be used as raw materials for chemical or biological diesel oil. Turning waste into wealth, this technology has fundamentally solved the difficult problem of innocent treatment of dead livestock and poultry.







无害化处理设备 HARMLESS TREATMENT OF L

工艺及设备优势:

- ◆ 单班综合产能提高 可根据客户需求设计工艺。产能小可采用化制干燥一体机、降低设备成本 产能大可设计成自动化 生产线,这样可以降低化制干燥机的工作时间,提高设备工作效率。增加产能。
- ◆ 设备密封件能好 设备之间全密封连接 车间无跑冒滴漏现象 丁作环境好。
- ◆ 原料经破碎后 变成30mm左右的块状 消减空隙 化制均匀彻底 也可根据客户实际需要 整体投料化制。
- ◆ 本工艺重在杀死畜禽所含有害病菌 采用高温、高压处理杀死病菌更彻底 处理更方便、快捷。
- ◆ 本工艺处理后的物料可做成有机肥和化工原料。变废为宝。提高经济效益。并从根本上解决病死畜禽流入市场这一难 颢.
- ◆ 产生的废气采用冷凝和UV光氧离子除臭处理 除去恶臭气味 可达到国家排放标准。
- ◆ 车间可实现全自控无人值守操作。

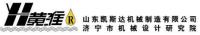
TECHNOLOGY & EQUIPMENTS ADVANTAGES:

- Comprehensive productivit of one-shift work is greatly improved, and technology process can be adjusted according to customer need. Small productivity can use boiling-drying machine to reduce the cost of equipment; large productivity can design to be automatic production line, so as to lessen working time, improve equipment efficient, and increase production capacity.
- Equipment has good seal performance, and fully sealed connection between equipments guarantee no leakage \$ dropping phenomenon, and good working environment.
- Raw material will be broken into bulks around 30 mm to reduce interspace. It also can be feed integrally according to customer's actual needs
- ♦ This technology focuses on killing harmful bacteria of livestock and poultry. Using high temperature and high pressure drying and sterilization system will be more thorough, more convenient, and more efficient.
- ♦ The processed material can be made into organic fertilizer and chemical raw materials. Turning waste into wealth, improving economic performance, this technology has fundamentally solved the difficult problem of dead livestock and poultry flowing into market.
- ♦ Waste gas, which will be treated by condensation and UV light oxygen ion deodorization process to get rid of bad odor, can meet the national discharge standard
- Full automatic, unattended operation.





创新发展



和谐共赢

近年来CHEMSTA公司设计建造的部分工程

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1	山东三维油脂集团	6	黑龙江省阳霖油脂集团				
2	山东中阳生物科技有限公司	7	俄 .AMUR ASSOCIATED ENTERPRISE				
3	山东长润生物科技有限公司	8	吉林丰正大豆食品有限公司				
4	山东万得福实业集团有限公司	9	福建长德蛋白科技公司				
5	山东万得福生物科技有限公司	10	福建兴宇实业有限公司				
低温豆粕工程							
1	山东禹王实业有限公司	7	哈尔滨禹王植物蛋白有限公司				
2	山东蓝山(高唐)集团	8	湖北省云梦龙云蛋白食品有限公司				
3	山东嘉华保健品股份有限公司	9	黑龙江霖油脂集团				
4	山东万得福植物蛋白实业有限公司	10	黑龙江弘正大豆有限公司				
5	山东瑞祥生物科技开发有限公司	11	江苏永友食品科技有限公司				
6	山东三维油脂集团	12	俄 .AMUR ASSOCIATED ENTERPRISE				
	棉料	子蛋白工	程				
1	新疆阿克苏惠鑫油脂有限公司	6	新疆鑫立植物蛋白科技有限公司				
2	巴州友邦生物科技有限公司	7	德州中佃生物科技有限公司				
3	巴州众恒油脂有限公司	8	山东鸿润油脂有限公司				
4	陕西中恒粮油工程技术有限公司	9	甘肃禾麟油脂蛋白有限公司				
5	山东佰郑集团	10	莘县马北油棉厂				
	ž	曲脂工程					
1	山东嘉冠粮油工业集团有限公司	29	益海集团				
2	山东金胜粮油食品有限公司	30	扶余鲁花浓香花生油有限公司				
3	陕西石羊集团	31	阜新鲁花浓香花生油有限公司				
4	恒大(双鸭山)粮油有限公司	32	正阳鲁花浓香花生油有限公司				
5	恒大(黑河)粮油有限公司	33	山东鲁花浓香花生油有限公司				
6	恒大(绥化)粮油有限公司	34	新乡鲁花浓香花生油有限公司				
7	中纺(新沂)油脂工业有限公司	35	莱阳鲁花香味油有限公司				
8	中粮(费县)油脂工业有限公司	36	新沂鲁花浓香花生油有限公司				

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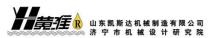






# **PARTIAL PROJECT LIST IN RECENT YEARS**

	Soybean Protein Co	nce	entrate Project
1	Shandong Sanwei Oils & Fats Group	6	Heilongjiang Yanglin Oils & Fats Group
2	Shandong Zhongyang Biotechnology Co.,Ltd.	7	Russia Blagoveshchensk Amur Associated Enterprise
3	Shandong Changrun Biotechnology Co.,Ltd.	8	Jilin Fengzheng Soybean Food Co.,Ltd.
4	Shandong Wonderful Industrial Group Co., Ltd.	9	Fujian Changde protein Technology Co., Ltd.,
5	Shandong Wonderful Biotechnology Co., Ltd.	10	Fujian Xingyu Industrial Co., Ltd.,
	Low-temp Soybe	an N	Meal Project
1	Shandong Yuwang Industrial Co.,Ltd.	7	Harbin Yuwang Vegetable Protein Co.,Ltd.
2	Shandong Lanshan (Gaotang) Group	8	Hubei Yunmeng Longyun Protein Food Co.,Ltd.
3	Shandong Jiahua Health Product Co.,Ltd.	9	Heilongjiang Yanglin Oils & Fats Group
4	Shandong Wonderful Vegetable Protein Industrial Co., Ltd.	10	Heilongjiang Hongzheng soybean Co., Ltd.
5	Shandong Xiangrui Biotechnology Co.,Ltd.	11	Jiangsu Yongyou Food Science & Technology Co.,Ltd.
6	Shandong Sanwei Oils & Fats Group	12	Russia Blagoveshchensk Amur Associated Enterprise
	Cottonseed Pr	otei	in Project
1	Xinjiang Aksu Huixin Oils & Fats Co.,Ltd.	6	Xinjiang Xinli Vegetable Protein Science & Technology Co.,Lt
2	Bazhou Youbang Biotechnology Co.,Ltd.	7	Dezhou Zhongdian Biotechnology Co.,Ltd.
3	Bazhou zhongheng Oils & Fats Co.,Ltd.	8	Shandong Hongrun Oils & Fats Co.,Ltd.
4	Shanxi Zhongheng Grains& Oils Engineering Technology Co.,Ltd.	9	Gansu Helin Oil & Protein Co.,Ltd.
5	Shandong Zhengbai Group	10	Shenxian Mabei Oil & Cotton Factory
	Oils & Fat	s Pr	oject
1	Shandong JiaGuan Grain and Oil Industry Group Co., Ltd.	29	Yihai Kerry Group
2	Shandong Jinsheng Cereals Oils & Foods Co., Ltd.	30	Fuyu Luhua Peanut Oil Co., Ltd.,
3	Shanxi Shiyang Group	31	Fuxin Luhua Peanut Oil Co., Ltd.,
4	Hengda (Shuangyashan) Grains & Oils Co.,Ltd.	32	Zhengyang Luhua Peanut Oil Co., Ltd.,
5	Hengda (Heihe) Grains & Oils Co.,Ltd.	33	Shandong Luhua Peanut Oil Co., Ltd.,
6	Hengda (Suihua) Grains & Oils Co.,Ltd.	34	Xinxiang Luhua Peanut Oil Co., Ltd.,
-	riongua (cumua) cramo a cho co.,eta.		
7	Chinatex (Xinyi) Oils & Fats Industry Co.,Ltd.	35	Laiyang Luhua Oils Co., Ltd.,



# 创新发展 和谐共赢

9	山东光大日月油脂有限公司	37	山东凯立丰粮油有限公司			
10	邦基三维油脂有限公司	38	山东鸿远油脂有限公司			
11	山东群福农业发展有限公司	39	青岛源涛饲料有限公司			
12	江苏东宝粮油集团有限公司	40	浙江新市油脂股份有限公司			
13	黑龙江金谷农业科技有限公司	41	湖北宏凯工贸发展有限公司			
14	黑龙江庆安阳达大豆加工有限公司	42	山东博润油脂有限公司			
15	黑龙江联凯大豆加工有限公司	43	长春玉成淀粉糖有限公司			
16	庆丰集团克山昆丰油脂有限公司	44	大庆博润油脂有限公司			
17	宝清县三江油脂有限公司	45	俄罗斯乌苏里斯克大豆油脂加工厂			
18	黑龙江建三江农垦金满昌科技工贸有限公司	46	俄罗斯布市、阿穆尔农业联合企业公司			
19	黑龙江省鸿源油脂有限公司	47	越南QMC公司			
20	鸡西市绿然油脂有限公司	48	俄.KALACH SINA-AGRO CO. LTD			
21	黑龙江龙江福粮油有限公司	49	山东龙大植物油有限公司			
22	黑龙江明达粮油有限公司	50	青岛长生集团			
23	黑龙江利通油脂有限公司	51	青岛天祥食品集团喜燕植物油有限公司			
24	黑龙江省祥源油脂有限公司	52	烟台龙源油食品有限公司			
25	山东玉皇粮油有限公司	53	开封龙大植物油有限公司			
26	山东光大绿源油脂有限公司	54	山东兴泉油脂有限公司			
27	山东金日植物油有限公司	55	河南正康粮油有限公司			
28	山东盛泉油脂有限公司	56				
	天然产物!	提取.	工程			
1	青岛大学天然产物工程公司	4	中化(青岛)生物工程有限公司			
2	云南博浩天然产物有限公司	5	吉林美好天然色素提纯有限公司			
3	青大物产股份有限公司	6	新疆纪元生物科技有限公司			
	美标(ASME)	压力	容器制造			
1	泰国AD公司	4	美国MALL工程公司			
2	泰国PNS公司	5	美国GOML工程公司			
3	雪佛龙(天津)公司	6	加拿大FLO-BACK工程公司			
科研院所						
1	浙江大学	5	天津大学			
2	山东大学	6	山东理工大学			
3	河南工业大学	7	江南大学			
4	国家粮食储备局西安油脂科学研究设计院	8	国家粮食储备局无锡科学研究设计院			
			生的人化似化			

# 一个成熟的品牌是你最佳的合作伙伴





	4		
9	Shandong Guangda Riyue Oils & Fats Co.,Ltd.	37	Shandong Kailifeng Grains & Oils Co.,Ltd.
10	Bangji Sanwei Oils & Fats Co.,Ltd.	38	Shandong Hongyuan Oils & Fats Co.,Ltd.
1	Shandong Qunfu Agricultural Development Co.,Ltd.	39	Qingdao Yuantao Feed Co.,Ltd.
2	Jiangsu Dongbao Grains & Oils Group Co.,Ltd.	40	Zhejiang Xinshi Oils & Fats Co.,Ltd.
3	Heilongjiang Jingu Agricultural Science & Technology Co.,Ltd.	41	Hubei Hongkai Industry & Trade Development Co.,Ltd.
4	Heilongjiang Qingan Yangda Soybean Processing Co.,Ltd.	42	Shandong Borun Oils & Fats Co.,Ltd.
5	Heilongjiang Liankai Soybean Processing Co.,Ltd.	43	Changchun Yucheng Starch Sugar Co., Ltd.
6	Qingfeng Group Keshan Kunfeng Oils & Fats Co.,Ltd.	44	Daqing Borun Oils & Fats Co.,Ltd.
7	Baoqing Sanjiang Oils & Fats Co.,Ltd.	45	Russia Ussuriyskiy Soybean Oils & Fats Factory
8	Heilongjiang Jiansanjiang Jinmanchang Technology Industry & Trade Co.,Ltd.	46	Russia Blagoveshchensk Amur Associated Enterprise
9	Heilongjiang Hongyuan Oils & Fats Co.,Ltd.	47	Vietnam QMC Corporation
0	Jixi Lvran Oils & Fats Co.,Ltd.	48	Russia Kalach SINA-AGRO Co.,Ltd
1	Heilongjiang Longjiangfu Grains & Oils Co.,Ltd.	49	Shandong Longda Vegetable Oil Co.,Ltd.
22	Heilongjiang Mingda Grains & Oils Co.,Ltd.	50	Qingdao Changsheng Group
23	Heilongjiang Litong Oils & Fats Co.,Ltd.	51	Qingdao Tianxiang Food Group Xiyan Vegetable Oil Co.,Ltd.
24	Heilongjiang Xiangyuan Oils & Fats Co.,Ltd.	52	Yantai Longyuan Oils & Foods Co., Ltd.
25	Shandong Yuhuang Grains & Oils Co.,Ltd.	53	Kaifeng Longda Vegetable Oil Co.,Ltd.
6	Shandong Guangda Lvyuan Oils & Fats Co.,Ltd.	54	Shandong Xingquan Oils & Fats Co.,Ltd.
27	Shandong Jinri Vegetable Oil Co.,Ltd.	55	Henan Zhengkang Grains and Oils Co., Ltd.
28	Shandong Shengquan Oils & Fats Co.,Ltd.	56	

# **Natural Products Extraction Project**

1	Qingdao University Natural Product Engineering Corporation	4	Sinochem Qingdao Biotech Co.,Ltd.
2	Yunnan Bohao Natural Product Co.,Ltd.	5	Jilin Meihao Natural Pigment Purification Co.,Ltd.
3	Qingdao University Materials Co.,Ltd.	6	Xinijang Jiyuan Biotech Co.,Ltd.

# **ASME Pressure Vessel Fabrication**

1		Thailand AD Corporation		America MALL Engineering Corporation
	2	Thailand PNS Corporation	5	America GOML Engineering Corporation
	3	Chevron (Tianjin) Corporation	6	Canada FLO-BACK Engineering Corporation

# Scientific Research Institute

Scientific Research Institute				
1	ZHEJIANG UNIVERSITY	5	TIANJIN UNIVERSITY	
2	SHANDONG UNIVERSITY	6	SHANDONG UNIVERSITY OF TECHNOLOGY	
3	HENAN UNIVERSITY OF TECHNOLOGY	7	JIANGNAN UNIVERSITY	
4	XI'AN OILS & FATS SCIENTIFIC RESEARCH AND DESIGN INSTITUTE(STATE BUREAU OF GRAIN RESERVE)		WUXI OILS & FATS SCIENTIFIC RESEARCH AND DESIGN INSTITUTE(STATE BUREAU OF GRAIN RESERVE)	

# A MATURE BRAND

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ITS LONG!

INTERSECTION WITH HEART, INTO