





ABOUT COMPANY

Head office of CISS GROUP is located in Singapore. We have teamed up our forces, experience and knowledge in order to offer only the best practice and business solutions in the field of independent inspections and vessels chartering for active commodities traders, producers and others players all over the world.

Operational excellence and high standards of **CISS GROUP** allow our partners feel protected twenty-four-hour a day.









comprehensively along the entire supply chain. Through years of our presence on the market we have gained the trust of traders, shippers and buyers.

Our dedicated team of experts in rice inspection and analysis will provide you with a reliable assurance of quality, quantity and safety and traceability for any rice cargo.

CISS GROUP is a proven leader in testing and certification of rice markets. Through a global network of experienced inspectors and laboratory personnel we are able to service clients' inspection requirements and mitigate risk with professional independent inspection and certification services.

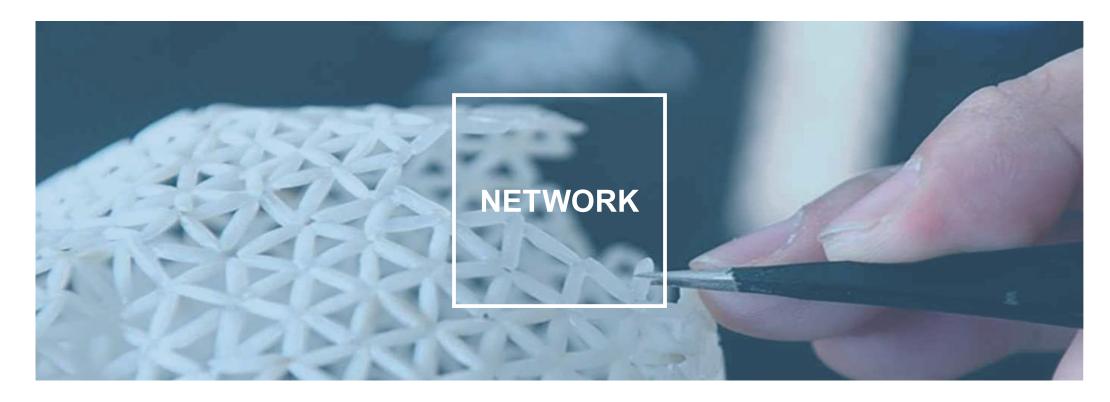




CISS GROUP local teams ensure prompt and efficient execution of orders for all rice services throughout the globe.

CISS GROUP rice operations are situated throughout the main origin countries, such as India, Thailand, Vietnam and Pakistan. Each country has their own team of specialized surveyors with insight and knowledge of each grower and logistics supply chain ensuring control of the product throughout the growing or processing cycles, as well as rice grading & testing facilities.

We also offer our services at other origins such as South America, Cambodia, Myanmar and the US.





Our expertise covers inspections of traditional milled white rice and Paddy varieties, as well as specialist fragrant and basmati varieties from Pakistan, India and Thailand.

Our services include:

- On site grading as per local/export standards
- Analysis services
- Food safety
- · Low level residue testing
- Fumigation services

- · Variety verification
- Container and vessel loading inspections including sampling, weighing services and cleanliness acceptance of transportation units
- Warehouse tally services
- Stock monitoring and storage management services





Inspection services range from preshipment inspection, supervision of loading and discharge, sampling, weight control and tallying to analysis in our GAFTA approved laboratories. GAFTA 124 sampling rules are strictly adhered to for all rice inspections, unless there is a specific sampling directive from our principals.

Warehouse inspections would verify that storage areas are free from infestation and foul odour. Inspection of bagged rice cargoes include marking verification, packing inspection, examining strength of bags and random check weighing.

Rice inspection, testing and risk management services – offered along the rice supply chain – include:

Pre-shipment inspection

- Cargo identification
- Packaging verification
- Product sampling, grading and weight verification

Loading and discharge supervision

- Vessel cleanliness and lock tight check
- Tally supervision
- Sampling, grading and weight verification
- Photographic reporting

Weighing and sampling

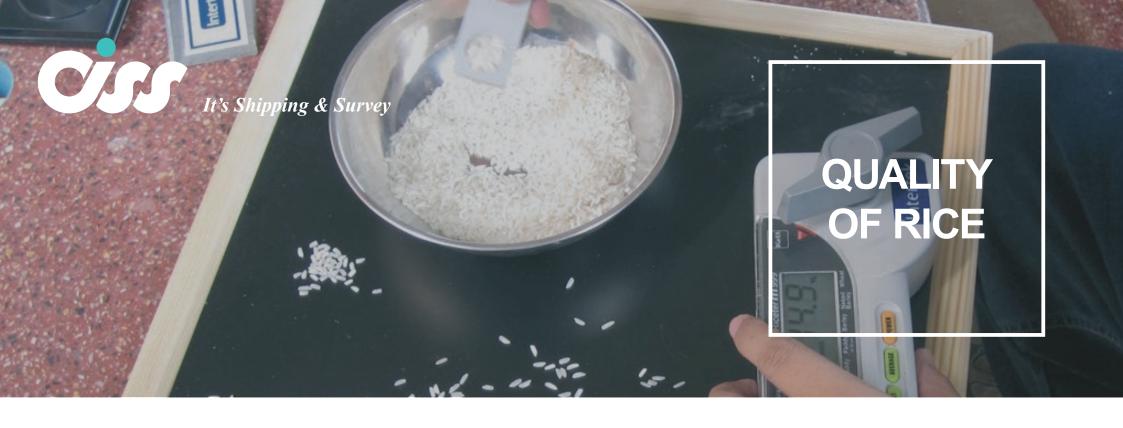
- Verification of scales
- Gross weight, tare weight, and net weight determination

Laboratory testing

- Complete physical and chemical analysis
- Standard specific capabilities
- Grading
- Heavy metals
- Pesticide residue and contamination analysis







The United States
Department of Agriculture
has established American
rice grades in which
sample grade is based on
quality discount factors.

These factors include weed seed, red rice, seed mixture, damaged kernels, chalky kernels, etc. Rice milling yield may be lower if rice is harvested either at very high or low moisture seasons. At the time of prevailing high moisture contents, many kernels can still be thin and immature and often break during the milling process. The ends of wet rice kernels grind off and become dust when they are processed. Rice may fissure if it dries to below 15 percent moisture content and is rapidly rewetted (e.g., rainfall, heavy dew). Rapid rewetting is a key cause for lowered head rice yields. Certain cultivars may be more susceptible to head rice yield

reductions than others if rice drops below 15 percent moisture and is rewetted in the field. Environmental conditions, such as drought, high night time temperatures, low sunlight intensity, disease, inadequate or excessive nitrogen and draining water early in hot weather are all very important for the rice quality. All these factors intensify stress on rice kernels. The susceptibility of kernels to develop chalk or other kernel-weakening features in response to stress differs between cultivars.

Milled rice yield is the weight percentage of rough rice that remains as milled rice (i.e., the sum of head rice and "brokens" after milling).



Foreign Matter

Foreign matter or trash (i.e., blank kernels, stems, weed seed) often contains more moisture than rice kernel. Presence of this material can affect rice price and, ultimately, net profit. Milling yield is lowered by the amount of foreign material in the rough rice sample. Foreign material contributes to heating on trucks, blocks air flow in rice storage bins and increases the time and energy required for drying.

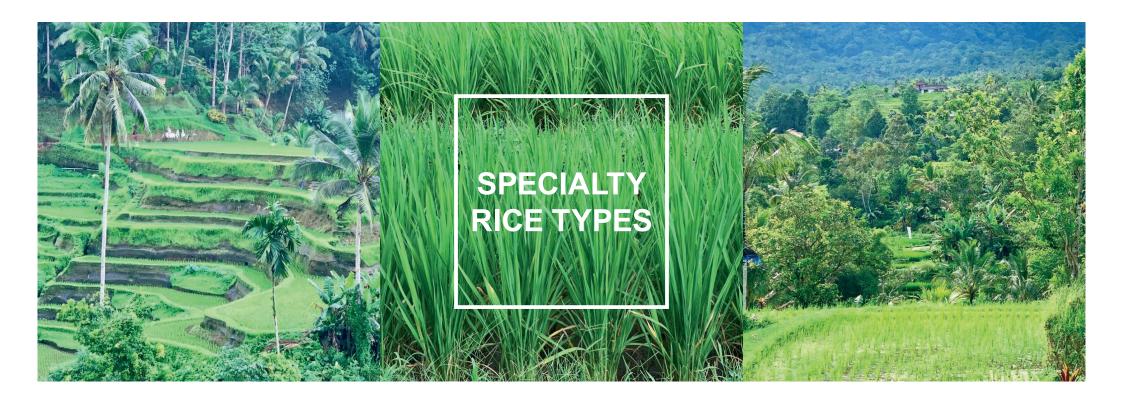




Quality factors

There are many different types of rice with many different qualities to suit different consumer preferences. Quality factors relate to grain length, stickiness, aroma, texture, and flavor. Nutritional content may also vary between different types of rice. Oryza sativa - or Asian rice - contains two broad groups: indica (long-grain) and japonica (short-grain). Other types of Asian rice include glutinous rice and aromatic rice. Oryza glaberrima - or African rice - includes long and short-grain varieties. All varieties of rice can be processed post-harvest as either white or brown rice, affecting flavor, texture and nutritive value.

Milling of post-harvest rice always leads to some grains being broken; a higher proportion of broken grains decreases the price since the quality is generally acknowledged to be reduced.





Length

Indica varieties of Asian rice are long-grain and usually grown in hot climates, whereas japonica varieties of Asian rice are short-grain and include both temperate and tropical varieties. African rice and glutinous rice (a variety of Asian rice) also come in long- and short-grain varieties.

SPECIALTY RICE TYPES

Short-grain

In short-grain rice varieties, including japonica varieties of Asian rice, grains tend to stick together when cooked. This is not to be confused with glutinous (or 'sticky') rice, desrcibed later on this page. Japanese rice (uruchimai or 'sushi rice') is a short-grain variety. Another popular short-grain variety is Arborio. Short-grain rice refers to rice with grain length up to 5.2 mm.

Long-grain

Long-grain rice does not stick together when cooked, but tends to remain separate and 'fluffy'. Most of the rice produced in southern Asia, including India and Thailand, is Indica (long-grain) rice. Basmati rice (mainly grown in India and Pakistan) and Jasmine rice (only grown in Thailand) are two popular varieties of long-grain rice, and both are aromatic or fragrant, described in more detail later on this page. Long-grain rice refers to rice with grain length over 6 mm.

Medium-grain

Medium-grain rice refers to rice with grain length between 5.2 mm and 6.0 mm.





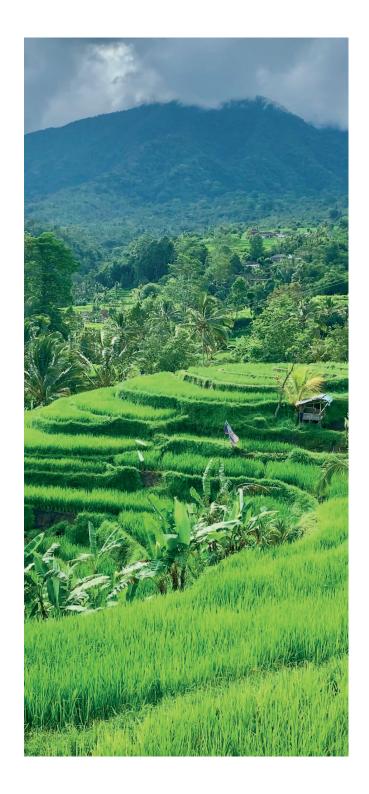
Stickiness (glutinousness)

Glutinous rice varieties originate from Lao PDR and northeast Thailand, where they are the staple food. Among glutinous rice varieties, physical characteristics, quality and environmental adaptations vary widely. Some glutinous rices are aromatic, colors include white, purple and black, and grain size varies. Glutinous rice is opaque when raw, unlike most non-glutinous rice varieties, which are somewhat translucent when raw.

SPECIALTY RICE TYPES

Flavor

Flavor of rice differs by type of rice (variety, grain length, stickiness, color, etc.) and also depends on whether or not it has been polished (i.e. brown or white rice) and, of course, cooking methods. Those considerations are obvious to most of us. But flavor may also vary by genetics, the growing environment, type of fertilizer and cultural practices (which affect amylose and protein content), the timing of draining and harvesting the field (affecting maturity and moisture content, and also amylose and protein content), harvest moisture content, rough rice drying conditions, final moisture content, storage conditions (temperature and length of time), degree of milling, and finally also washing and soaking practices and serving temperature of the cooked rice





Aroma

Aromatic rice is another variety of Asian rice, with medium to long grains and a light, fluffy texture and nutty or popcorn-like aroma when cooked. Aromatic rice is also generally said to have a nutty flavor, which is more pronounced in brown (unpolished) aromatic rice. The most internationally well-known types of aromatic rice are basmati and jasmine.

Jasmine rice, grown only in Thailand, is distinguished by its fragrance and a water milling process that leaves the grains silken to the touch. The grains are similar in size to long-grain rice but cook moist and tender like a medium-grain rice.

Basmati rice, grown mostly in India and Pakistan, is renowned for its long, slender shape that elongates rather than expands in width when it is cooked. The word 'basmati' means 'queen of fragrance', and the rice is distinguished by its aroma. There are hundreds of other aromatic varieties grown and consumed locally, but basmati is the only one that is exported

In the United States, domestically grown aromatic rice varieties include **Texmati** (a cross between 'American' long-grain rice and basmati rice), Wehani (developed by Lundberg Family Farms in California, using basmati seeds), and Wild Pecan rice (another basmati hybrid developed in Louisiana).

Aroma is detected when the volatile compounds of the rice enter the nasal passage. A good perfumer can reportedly differentiate 150–200 odorous qualities and rice aroma is typically described by trained panelists using a lexicon with 10–12 descriptors

The aroma of rice is mainly caused by the presence of the chemical compound 2-acetyl-1-pyrroline. But it is likely that many oils, phenolics and organic compounds are involved, such that hundreds of unique varieties of aromatic rice exist, in addition to many hybrids .

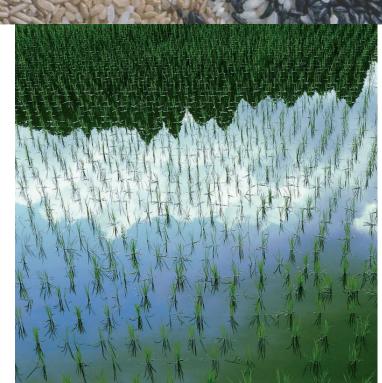
SPECIALTY RICE TYPES





There are a number of 'speciality' rices available, including colored rice and aromatic rice (already described above) and wild rice, black, purple and red rice

In some parts of the world, especially in North America and Europe, rice is developing a new market niche as a staple and as a gourmet food. This trend appears to be related to the arrival of large numbers of immigrants from Southeast Asia, who introduced aromatic rice to markets where it was previously unknown. It has been adopted by a food-quality-conscious public over the past several years.





Our laboratories are equipped with the latest instrumentation, from precision balances to gas chromatographs and polarimeters which allows us to rice to most of usually required in the local as well as international trade standards parameters such as:

- Moisture
- Average length of grain
- Broken grain, chalky grain
- Yellow / damaged
- Discolored grain
- Foreign matter

- Milling quality
- Moisture and test weight
- Protein
- Starch
- Specific weight
- Infestation





Benefits of using CISS Group inspections for rice trading and growing community are many, nevertheless the most important are:

- Global network of qualified inspectors and state-of-the-art laboratories
- Experienced graders and execution teams ensuring representative sampling and grading of the shipment.
- Local grower and supply chain knowledge
- · Prompt and efficient order execution and reporting of results

We work with major rice exporters, importers, international traders and buyers. Our mission is to exceed our customers' expectations with innovative assurance, testing, inspection and certification services for their operations and supply chain.







10 Anson Road, #20-05 International Plaza Singapore (079903) Reg.No 201618838R

Operation office: 77 Science Park Drive Str., Business Center CINTECH III, #03-25/26, Singapore, 118256 Department
of contracts execution:
ciss@ciss-group.com
inspection@ciss-group.com

General questions:

office@ciss-group.com

+(65) 9391-9397 Singapore, Head office

+41 79 235 23 28 Switzerland

+31 6 826 86968Netherlands (ARAG)

+48 (668) 103 000 Poland

+90 (539) 640 09 45 Turkey

+380 67 6300 181 +380 50 3277 575 Ukraine, Romania, Bulgaria

+20 106 600 0638 +20 105 079 2003 Egypt

+1 778 798 9397 Canada