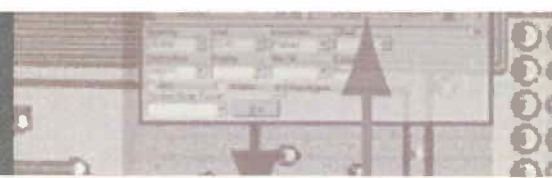


Pure Algorithmic Trading Solutions



WHEN TACTICS OVERWHELM STRATEGY

Taking Charge

Technology and sophisticated trading tools help traders find the best trading venues. However, in a fragmented environment traders risk being consumed with tactical decision-making at the expense of strategic decision-making.

Institutional traders are increasingly looking to address this imbalance by automating the fill-by-fill "chiseling." A strong competitive alternative would allow traders to define algorithms that automate global order execution — from simple execution rules for small orders to sophisticated strategies for large orders — while incorporating technical indicators and maintaining cash-balancing. Employing algorithmic solutions may significantly increase trading efficiency, empowering traders to act as a stronger strategic partner to portfolio managers.

Working with You for All These Years

Instinet, which has offered algorithmic trading solutions for more than a decade, puts the trader back in the role of managing trading strategy. We offer a comprehensive suite of algorithmic strategies with access to global equity markets. Instinet's algorithms enable traders to minimize market impact and trade against predefined benchmarks such as VWAP or Arrival Price.

Our experienced in-house sales traders work with our clients to create custom rules that adapt to individual trading strategies, taking advantage of a wide variety liquidity pools including certain equities crossing networks, ECNs and exchanges.

Alternatively, Instinet's off-the-shelf rules, developed for the most common trading strategies, include:¹

Block PegSM

BlockPegSM allows you to join the bid on an exchange, e.g. NYSE's DOT, and peg up and down as the bid moves (or ask for sell orders). With larger orders it will only show appropriate size to the exchange, sending some of the residual to the INET ECN and keeping the remainder to interact with Instinet's institutional order flow.

- **Example:** Buy 50,000 GE, Style Passive, Limit \$37.06 = "Buy 50,000 GE with a \$37.06 top, post on the bid on DOT and INET, but at the mid-spread on Instinet's internal book and Intraday Cross."
- **Example:** Buy 50,000 GE, Style Aggressive, Limit \$37.06 = "Buy 50,000 GE with a \$37.06 top, post on the bid on DOT and INET, but at the mid-spread on Instinet's internal book and Intraday Cross, and lift the offer on DOT and INET to take available liquidity within my limit."

Global VWAP

The Global VWAP rule is designed to match the volume-weighted average pricing (VWAP) for the day or a user-selected time period.

- **Example:** Buy 400,000 YHOO, Start 9:30 A.M. End 4:00 P.M., 25% volume constraint, \$38.30 limit = "Buy 400,000 shares of YHOO throughout the trading day to match day VWAP, but be never more than 25% of the stock's volume, and don't exceed my \$38.30 limit."

TWAP

The TWAP rule has similar features to Global VWAP, but is designed to trade at an even rate, rather than a volume based curve.

- **Example:** Buy 50,000 NXTL, Start 1:00 P.M. End 3:00 P.M., 5% volume constraint = "Buy 50,000 shares of NXTL evenly spread out between 1 P.M. and 3 P.M., but be never more than 5% of the stock's volume."

Volume Participation

The Volume Participation rule trades in line with a stock's volume according to the percentage of volume you wish to be.

- **Example:** Buy EBAY, Limit \$116, @ 5% Volume, Start time 11:00 A.M., End time 1:00 P.M. = "Buy EBAY with a \$116 top between 11 A.M. and 1 P.M. at 5% of the stock's volume during that time period. Price the order passively but more aggressively if prices start to move."

Careful Discretion

The Careful Discretion rule is configured to beat the mid-spread price at the time the order was received. As such, it can be used to minimize implementation shortfall by beating the arrival price.

- **Example:** Buy 100,000 CNXT Limit \$2.02 = "Buy 100,000 CNXT with a \$2.02 top as quickly as possible but without causing market impact. Post on the bid as long as the stock is just trading sideways, but pay the spread if and when it is starting to move up."

Contingent Pairs

Automates relative value pairs trading strategies. Can be used for single pairs, or for relative value baskets.

- **Example:** Buy DAL @ Weight of 1 Sell AMR @ Weight of .5 = "Buy DAL and short-sell AMR as long as DAL's price is 50% or less of AMR. Don't buy one without selling the other."

Risk Arbitrage

- Automates the execution of risk arbitrage strategies.
- The rule can be configured to trade based on a deal ratio (i.e. number of shares of the acquiring company exchanged for each share of the target company), a cash component, or both.
- **Example:** Buy Stock A @ Weight of 4 Sell B @ Weight of 1 + Cash Component of \$1, Discount factor 80% = "Buy Target and Sell Acquirer as long as Target's price is equal to or less than 80% of (.25 of Acquirer plus one dollar)."

Why Unconflicted Matters in Algorithmic Trading

Institutional customers are learning that while having a sophisticated rule is important, keeping that rule under tight wraps is even more critical. While traditional brokerages with proprietary trading operations may never data-mine the customer's unexecuted order information, a firm can make logical inferences based on its unique knowledge of the rule it has written, and can adjust its proprietary trading strategy based on this unique information.

At the heart of the Instinet's algorithmic model is the guarantee that no one at Instinet has the means or motive to capitalize on your trading information to benefit any proprietary trading interest. Quite simply, Instinet does not have related businesses that would tempt us to leverage your trade information for our benefit.

Pure Research Trading Solutions

BEYOND BUY AND SELL

Investors are less interested in the traditional Wall Street research offering of earnings estimates, buy and sell recommendations, and analyst opinion shaped by corporate public relations. At the same time, however, demand for good investment ideas continues to grow.

Indeed, market participants are increasingly seeking research that is independent and objective, and provides direct access to unbiased information from primary sources, including consumers, suppliers, customers and industry experts.

Instinet Research Partners (IRP)

IRP is a select, pre-screened group of independent research firms with an established track record of providing institutional investors with objective analysis and insight on specific companies and sectors.

These firms make use of non-traditional research methodologies, combining a network of industry experts with market research and analysis in their industries. They work directly with industry participants to explain and predict industry and company trends. These firms focus on non-traditional research that emphasizes an empirical methodology, primary information sources and strict neutrality.

Our Providers

- **Cross Industrial Research** focuses on the automotive supply chain from specialized components producers to global manufacturers, and on industrial sectors like materials, construction and components.
- **Datamonitor** offers comprehensive independent research in pharmaceuticals and biotechnology.
- **Ross Smith Energy Group** combines skills in reservoir engineering, economics and financial analysis to evaluate oil and gas exploration and production companies.
- **Retail Intelligence Group** provides unbiased research in retailing and restaurants through market research and statistical analysis.

What Criteria Do We Use in Selecting Partners?

In selecting partners, Instinet looks for the following characteristics:

Our research partners are rigorously independent. They do not engage in investment banking finance activities. They are free of corporate conflicts of interest. They do not take money from the companies they cover.

Our partners' non-traditional empirical approach to research often draws on a network of primary sources, like industry experts and consultants, and on opinion surveys. Our partners may give clients direct access to industry sources. In all cases, they are strategic and authoritative, designed to bring new ideas and fresh perspectives to investment managers.

Our partners are specialists, either in a specific industry or an analytical methodology. They offer wide coverage of their category at either the company or sector level.

Products and Services

Through a variety of channels, Instinet Research Partners provide subscribers with the information they need to make investment decisions.

Syndicated Research

In-depth reports on companies, industry segments, product categories and emerging industry issues.

Short Reports

Succinct reports on breaking news, companies, industries and investment ideas.

Customized Research

Our research providers undertake custom work for subscribers who want to test investment ideas and gather knowledge in specific areas. Customized research is embargoed to the client for at least two weeks before general release.

Analyst Support

Analysts are available to subscribers to answer questions and to discuss current research and perspectives on particular companies, industry segments and breaking news.

Why Unconflicted Research is Better

Instinet offers a clear alternative to traditional equity research. Our research providers operate far from Wall Street and their findings are not influenced by bankers anxious not to offend present or prospective clients.

Unlike many large brokerage firms with in-house research departments, Instinet does not produce research — we are an objective broker of independent investment research. Equally important, Instinet is a pure agency broker with no business-line conflicts of interest such as investment banking or proprietary trading.



AN AGENCY BROKER WITH A GLOBAL FOOTPRINT — AN UNCOMMON ADVANTAGE IN GLOBAL TRADING

For more than 15 years, Instinet has been a major player in the overseas markets, helping customers in the U.S. and globally reduce their transaction costs in international markets. Instinet was among the first brokers to offer clients electronic and un-intermediated access to global markets, and today combines powerful technology with the expertise of sales-traders to provide access to more than 30 markets worldwide. Our unconflicted business model, global reach, powerful technology and depth of experience allow Instinet to deliver sophisticated solutions to clients looking to reduce their international trading costs.

Foreign Affairs

Institutional traders rightly demand from their brokers the necessary tools and services to trade and compete in international markets, which often pose unique challenges.

- Stringent short sales rules
- Foreign ownership restrictions
- Unfamiliar clearing and settlement systems
- Untried local third party brokers
- Establishing electronic links to equity markets
- Thin liquidity in the ADR market

At Home Abroad

Given the additional complexity, it's no surprise that trading costs, both explicit and implicit, tend to be higher in international markets. Instinet delivers solutions for trading in international markets that meet the same standards of integrity, transparency and efficiency as investors are accustomed to when trading in the U.S. markets. In an Elkins-McSherry study on international trading market impact for the second quarter of 2004, Instinet consistently beat the overall broker average.¹ Instinet clients saved an average of 23 basis points on international trades.

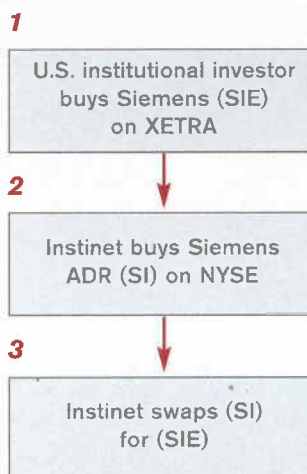
A Genuinely Global Platform

Instinet's global infrastructure combines FIX connectivity, sophisticated trading front ends, algorithmic, portfolio, and block trading solutions, as well as access to exchanges, ECNs and securities crossing networks worldwide. Clients can leverage this platform to access the liquidity of equity markets worldwide from their own desktops using direct market access (DMA), or by trading through our experienced teams of market professionals located in London, Paris, Frankfurt, Tokyo and Hong Kong.

Solutions Designed to Improve Operational Performance

Smooth trade execution and settlement, the nuts and bolts of the brokerage industry, are particularly critical when operating in more complex international markets. Trading and settlement problems are often much more costly in part because they aren't addressed for a day or more due to time-zone differences, and in part due to significantly higher clearing and custody costs. Instinet's focus on integrating our brokerage solutions into the workflow and systems of our clients ensures that whether you trade DMA, blocks or portfolios, you will always get timely and accurate confirmation of trades, commission costs, and taxes.

Reduce Trading Costs with Instinet ADR Conversions



The investor avoids the thin liquidity of the ADR market and the clearing and settlement headaches of holding foreign currency-denominated equities. These cost and liquidity benefits are achieved without sacrificing operational performance — orders and trades can still be transmitted via FIX.²

Why Unconflicted is Better for Your Global Trading Needs

Today's sophisticated institutions invest in stocks around the globe and require access to liquidity worldwide. Too often, however, trading in international markets has required institutions to make compromises or turn a blind eye to potential shortcomings in a broker's international capabilities or business model.

In contrast, Instinet provides clients with a global solution without compromises. The potential for conflicts of interest which may exist at firms with traditional brokerage services does not exist at Instinet. Our value proposition is founded exclusively upon servicing our customers, not competing with them. Every Instinet employee, system and decision is dedicated to improving execution performance for our clients.

CHALLENGES AND OPPORTUNITIES IN A CHANGING MARKETPLACE

With regulatory and marketplace changes having substantially reshaped equity trading the last few years, institutional investors are finding they need a firm that can provide them with efficient, cost-effective and unconflicted trading products.

A. While institutional investors and their brokers could once quickly and efficiently trade large blocks of less liquid stocks, they now confront a market where trading blocks of even the most liquid stocks requires them to take extra measures to preserve confidentiality and anonymity.

B. The decrease in average trade size has been accompanied by an increase in order fill times, as a greater number of trades are needed to fill an order. The result can often mean an increase in opportunity cost (the cost to the trader when the market moves away from him due to execution delays or missing the trade altogether).

THE INCREDIBLE SHRINKING TRADE SIZE

NYSE average trade size declined in 2003 and 2004 due to the introduction of decimalization in 2000, and the desire of institutions to conceal the size of their orders and maintain anonymity.

NYSE Average Trade Size



Source: NYSE.com

OPPORTUNITY COSTS

Opportunity costs has often been found to be the highest component of trading costs.

Trading Cost by Component

COUNTRY	United States
COMMISSION	0.24%
MARKET IMPACT	0.42%
OPPORTUNITY	1.06%
TOTAL	1.72%

NOTE

Trading costs expressed as a percentage of assets under management for a large buy-side firm, to buy and sell stock.

Source: Based on *Financial Insights* and Plexus Group, "The Trading Cost Imperative," 2003.

C. Traditional Brokers Have Become the Buy-Side's Chief Competitors.

"It's just plain irresponsible for a fund manager to assume Wall Street isn't going to take advantage of the information that you just bought a new stock for a \$10 billion fund, a stock you're probably going to be buying every day until you accumulate a 1% position."

JOHN WHEELER, HEAD TRADER, AMERICAN CENTURY,
"AMERICAN CENTURY'S SECRET WEAPON,"
MONEY MAGAZINE, SEPTEMBER 1, 2004

- Q1 2004 trading profits at investment banks rose by an average of 90% from the same period the previous year.¹
- Some sell-side firms have generated near \$1 billion in quarterly trading gains.²
- Traditional brokers have the potential to use their institutional customers' trading information to fuel proprietary trading profits.
- Every time an institutions' order information is compromised, their portfolios' investment performance can suffer.

NOTE

¹ "Investors Hit Out at Traders," *Financial News*, May 9, 2004

² Goldman Sachs, Inc. Earnings Release for the First Quarter of 2004

Pure Portfolio Trading Solutions

KEEPING A HUNDRED BALLS IN THE AIR AND NOT BREAKING A SWEAT

A Portfolio Primer

Portfolio trading, also known as basket or program trading, is how fund managers execute transactions of multiple (sometimes global) markets and funds, while managing each fund's weightings and risk exposures towards the client's targets without introducing additional unintentional risks.

With portfolio trading, instead of trading each individual order in a mechanical fashion, the trader can focus on controlling market and sector risk while seeking to minimize the market impact of the whole portfolio. This gives traders greater flexibility in timing the execution of individual orders, allowing them to better exploit the market's short term volatility for the benefit of the client.

A Pure Solution for Every Portfolio Trading Need

Instinet portfolio trading can be designed to offer institutions solutions to meet their unique trading needs.

Customer Preference	Instinet Solution
Self-directed in-house trading	→ Electronic Trading Group
Access to a broker's expertise	→ Sales Trading Group
Combination of direct market access and sales trading	→ Tailored execution strategy

Instinet's Pure Portfolio Trading starts with the most important ingredient: A skilled and professional sales trader whose sole purpose is to trade for the customer.

Workflow Efficiencies and Global Access Through Newport™

Newport™, Instinet's patent-pending trading front-end system, is fully FIX-compliant and integrates with the customer's Trade Order Management System to deliver reliable straight-through processing. As a result, Instinet customers avoid common problems such as order entry and trade settlement errors.

Newport is also a multi-user system and has a powerful model for facilitating collaboration between fund managers, traders and brokers. Routing of orders within and between firms is also supported.

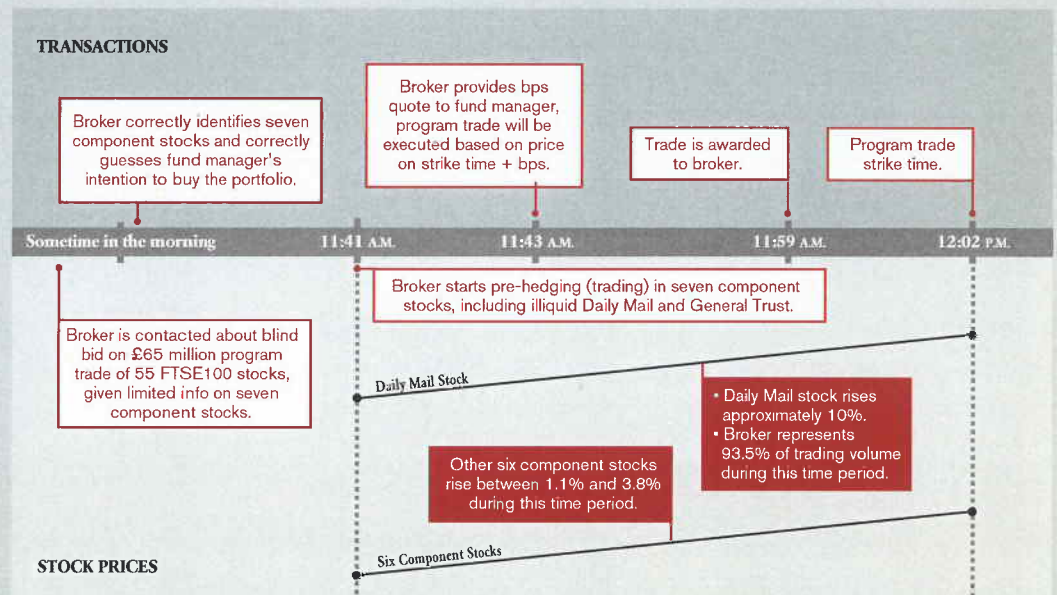
With Newport, Instinet clients have access to the company's deep pool of global institutional liquidity and sophisticated routing technology. From an intuitive point-and-click interface, you can tap liquidity in the more than 30 markets we have trading access.

Why Unconflicted Matters in Portfolio Trading

Based on the portfolio risk and composition characteristics provided by a buy side institution soliciting a 'blind bid,' full-service brokers can often ascertain the portfolio's component stocks, or highly correlated ones. With this information in hand, they can "pre-hedge" an order and then offer the client a low explicit commission. This pre-hedging, whether in the component stocks or in correlated stocks or other instruments, causes market impact, changing the trade's strike price to the customer's detriment.

As an agency broker with a strict code of conduct, Instinet protects the customer's best interests. Instinet can never pre-hedge your program trades, and with Instinet all costs involved with a program trade are completely transparent.

How a traditional broker with a proprietary desk could potentially drive up prices through undisclosed "pre-hedging" of a principal program trade.



NOTE: Diagrams are not drawn to scale.

Source: *Risk Magazine*, May 2004. Based on actual events.

Pure Block Trading Solutions

0.303	2,000	SELL	DELL	6
0.040	1,200	SELL	DIA	4
0.060	0,800	SELL	MSH	2
0.140	-0,000	SELL	DIA	10
0.014	1,500	SELL	EBA	10
0.007	3,440	SELL	EGH	1

TRADE SIZE EROSION, NEW TRADING STRATEGIES, MARKET STRUCTURE CHANGES AND TECHNOLOGICAL INNOVATION

Pure Block Trading Solutions

Instinet's Block Trading Solutions allow clients to trade directly with other institutional buyers and sellers utilizing a choice of block crossing platforms. In this unintermediated environment, institutions trading blocks got executions in the last two quarters of 2004 that were 26% and 13% higher than the average block trade on NYSE and NASDAQ, respectively.¹

In addition to maximizing opportunities to trade in size with other institutions upstairs, Instinet customers can minimize the risk of missing a trade downstairs. Instinet Crossing® platform allows institutions to trade with other natural buyers and sellers in size; Instinet ProActive SmartRouterSM works an order simultaneously in several market venues, including "upstairs" markets, ensuring that no opportunity to access liquidity is missed.

The Proof is in the Numbers

In the Plexus Q3 2004 survey of full-service brokers, Instinet ranked No. 1 for exchange traded blocks 10k-50k shares, No.1 for exchange traded blocks 50k shares and up, and No. 1 for NASDAQ blocks 10k-50k shares. In addition, Instinet ranked No. 1 for both Exchange-listed and NASDAQ blocks 10k-50k shares the four most recent quarters (Q4 2003-Q3 2004).²

Block Trading Trends

Recent regulatory modernization and market structure changes have made it more difficult for institutional traders to move large blocks of stock. The institutional trader now faces almost unprecedented challenges:

- Average trade size on NYSE, NASDAQ, NSX and ArcaEx combined have fallen by almost two-thirds since 1997 — from approximately 1,400 shares to 500 in the spring of 2004. It can now take as many as 375 executions to fill the average institutional block trade of 150,000 shares.³
- Approximately ten years ago, about 40% of U.S. institutional orders exceeded relevant stock's average daily volume.⁴ In late 2003, 80% of trade dollars in orders require more than one day's volume.⁵

Longer trade execution fill times expose institutions to potential adverse market movements. They also increase the likelihood that their trade information could be telegraphed in the marketplace potentially creating adverse market impact and greater transaction costs.

The Rise of Opportunity Costs

Not surprisingly, the decrease in the average trade size has been accompanied by an increase in order fill times, as a greater number of trades are needed to complete an order.

The result is a possible increase in opportunity cost — the cost associated with execution delays or missing the trade altogether. A joint study by Plexus Group and *Financial Insights* found that opportunity costs far exceed the other implicit and explicit costs of trade execution.⁶

The Smart Way to Move Blocks

Institutions clearly need solutions that facilitate effective size discovery while minimizing information leakage.

When an Instinet sales trader works an order, they are focused on one thing; getting the best price in the shortest possible time in the most cost efficient manner while protecting the client's identity.

And it shows.

Recent third-party research demonstrates that Instinet offers its institutional customers the best of both worlds: greater value-added over most brokerages for NYSE and NASDAQ blocks (see above), and, for all those times when the block does not find a natural counterparty and must be broken down, the number one broker for smaller executions for both NYSE and NASDAQ securities.⁷

In addition, Instinet has no business interests that compete with the performance of our clients: we focus on providing pure agency services. Our business is structured to maintain client anonymity and ensure that their trading intentions and strategy will not be compromised.

Is Broker Capital the Way to Go with Blocks?

To execute a trade, especially in less liquid stocks, institutional investors claim they need the capital of traditional brokerages. It isn't clear, however, that jump-starting an order with broker capital is the best strategy for buy-side firms.

By starting this way, institutions may find that they are limiting their flexibility to choose the strategy in which to trade residual shares and may turn the selected broker into a competing buyer or seller.

In this environment a trader is confronted with two less-than-optimal choices: not utilizing broker capital and possibly suffering high opportunity costs or using broker capital and potentially competing with the broker for market liquidity as a result.

Instinet, as a pure agency broker, has created the sophisticated products and unconflicted services for institutions to access size without broker capital with no detrimental effect on execution quality.